

FEBRUARY 1953

Galaxy

SCIENCE FICTION

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FOUR IN ONE by DAMON KNIGHT



GALAXY

Science Fiction

SEEDS OF LIFE

By JOHN TAINE

"SEEDS OF LIFE is Science fiction of a high order, a novel involving believable people in unusual situations.

THOUGHT of the atomic bomb and what exposure to its radiations might do has excited the imagination of thinking men and women everywhere.

"John Taine" (who is Dr. E. T. Bell of the California Institute of Technology) has permitted his imagination to investigate some of the possibilities in a similar fascinating theme. This is not a story involving the atomic bomb, however. Atomic energy is part of the story, but only an incidental part, as are such unlikely ingredients as a black widow spider, a two-million volt X-ray tube, chicken eggs which hatch out reptilian monsters, and other equally strange plot threads. Dr. Bell has again displayed his usual ability to write about the unusual.

When Dr. Andrew Crane of the Erickson Foundation tries to make a man of Neils Bork, his laboratory assistant, he succeeds in a spectacular manner. Bork himself contributes to the end result in his bungling way, and there emerges Miguel De Soto, a superman in every sense of the word. His rate of thinking and perceiving has accelerated many thousand times beyond that of any human being who has ever lived. He is a partial, accidental anticipation of the race man may be destined to become in the millenniums ahead.

SEEDS OF LIFE is written in the smoothly entertaining style which characterizes all of Dr. Bell's work, including such well-known books as "The Magic Numbers," "The Forbidden Garden," "The Iron Star," "Before the Dawn," "Mathematics, Queen and Servant of Science," and his many "John Taine" science novels. And it is adult reading fare, realistic, gripping and informative. Above all it is good entertainment.

AT YOUR NEWSSTAND

Galaxy

SCIENCE FICTION

ALL ORIGINAL STORIES • NO REPRINTS!

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BUY ME THAT!

NEVER in the entire history of civilization have there been so many toys, play costumes and amusements for children.

It's an alarming situation.

And why not? It's alarmed all other generations in the past; there's no reason why we should be spared.

The lessons of history should help, but they never do. No generation has yet known how to cope with the problem.

But we can try, can't we? Let's (as) rationally and objectively (as possible) scrounge around in the past in order to understand the present and anticipate the headaches our kids will inevitably have with their own kids.

For one thing, no matter how far back we go, the pattern remains identical:

Parents invariably give their children more toys and games than they had when they were youngsters. The children then have (at least it seems so to parents) everything to play with and nothing to play. The plaintive "What should I do now?" brings forth the outraged "Why, when I was your age—"

What comes after that gambit forms an oral record of the human race:

"—We didn't have wooden wheels to roll, just fire to play with."

"—I wasn't allowed to have any shrunken heads until I was old enough to go out and hunt for them."

"—I wouldn't even dare ask my father for a slave of my own."

"—We didn't have bows—"

"—arquebuses—"

"—ducking stools—"

"—stagecoaches—"

"—railroad trains—"

"—airplanes—"

And now, of course, it's all the paraphernalia in miniature of the Old West, crime, war, the Atomic Age and space exploration.

Very few adults have ever been able to resist delivering the why-when-I-was-your-age lecture. Having done my own share, I wonder what drives us to it. Partly exasperation, of course, but it must be mostly envy camouflaged by recollections of deprivation bravely borne.

The deprivation is obviously in the present, since one does not feel deprived of something that doesn't yet exist. We had our soapbox cars and other makeshift toys, including discarded eggbeaters and such from the kitchen, and we never suspected or missed the dazzlesome gadgets of today. Even if we had, though, we'd have kept it to ourselves; we'd only have been inviting still more tiring reminders of how much harder our elders'

childhoods were than ours.

Envy seems a mean emotion for an adult to have, but it shouldn't need an apology. Older generations as a rule *did* have less in their youth and, remembering that little and contrasting it with the next generation's engorgement, they couldn't possibly see how a child could own so many things and yet not know what to play with.

Naturally, we've outgrown the desire for toys, but here is the blunt truth—we wish we'd had them as children. Perhaps that envy is more visible in the case of books. At any rate, it is to me, because I recall digging doggedly along the bookshelves of public libraries in search of science fiction, of which there was hardly any and that bit hidden well among general titles, whereas children now are inundated with the stuff. Instead of having to hunt, they have to dodge.

What with toys, books, magazines, comics, radio, TV, movies and everything else, it does seem as if we have more to contend with and envy than any previous generation.

But what will our children face? The thought that they'll tell their children how little they had to play with may seem preposterous, but is it?

Toys are an excellent index to a civilization; they're non-func-

tioning replicas of devices in common use—as a rule. The exception, of course, is the element of fantasy in play and playthings. If an alien race tried to analyze our civilization via toys and books, it would have to conclude that we have space travel, disintegrator rays and so forth.

As technology advances and the number of gadgets increases, so must playthings become more numerous and complex. It would be absurd to expect one without the other. Also, barring an absolutely unthinkable racial catastrophe, it would be absurd to expect the process to do anything but accelerate.

What will our grandchildren play with? To know that, you'd have to be able to outguess progress. But you may be sure that toys will *at the very least* keep abreast of science and exploration.

Now add to that fact the certainty that we'll reach other planets within a single generation. Lord knows what we'll find there in the way of artifacts, pets and plants. *But whatever we find, the kids of that day will have either as imports or imitations.*

I feel sorry in advance for their parents, who'll yelp in vexation, "A whole solar menagerie and you don't know what to play with? Why, when I was your age—"

—H. L. GOLD



Four in One

By DAMON KNIGHT

George realized he was lucky. He fell into something scientists dream of—he was able to become completely absorbed in his work!

I

GEORGE Meister had once seen the nervous system of a man — a display specimen, achieved by coating the smaller fibers until they were coarse enough to be seen, then dissolving all the unwanted tis-

sue and replacing it by clear plastic. A marvelous job; that fellow on Torkas III had done it. What was his name? . . . At any rate, having seen the specimen, Meister knew what he himself must look like at the present moment.

Of course, there were distor-

Illustrated by ASHMAN



tions. For example, he was almost certain that the distance between his visual center and his eyes was now at least thirty centimeters. Also, no doubt, the system as a whole was curled up and spread out rather oddly, since the musculature it had originally controlled was gone; and he had noticed certain other changes which might or might not be reflected by gross structural differences. The fact remained that he—all that he could still call *himself*—was nothing more than a brain, a pair of eyes, a spinal cord, and a spray of neurons.

George closed his eyes for a second. It was a feat he had learned to do only recently and he was proud of it. That first long period, when he had had no control whatever, had been very bad. He had decided later that the paralysis had been due to the lingering effects of some anesthetic—the agent, whatever it was, that had kept him unconscious while his body was—

Well.

Either that or the neuron branches had simply not yet knitted firmly in their new positions. Perhaps he could verify one or the other supposition at some future time. But at first, when he had only been able to see and not to move, knowing nothing beyond the moment when he had fallen face-first into that mottled

green and brown puddle of gelatin . . . that had been upsetting.

HE wondered how the others were taking it. There were others, he knew, because occasionally he would feel a sudden acute pain down where his legs used to be, and at the same instant the motion of the landscape would stop with a jerk. That could only be some other brain, trapped like his, trying to move their common body in another direction.

Usually the pain stopped immediately, and George could go on sending messages down to the nerve-endings which had formerly belonged to his fingers and toes, and the gelatinous body would go on creeping slowly forward. When the pains continued, there was nothing to do but stop moving until the other brain quit—in which case George would feel like an unwilling passenger in a very slow vehicle—or try to alter his own movements to coincide, or at least produce a vector with the other brain's.

He wondered who else had fallen in. Vivian Bellis? Major Gumbs? Miss McCarty? All three of them? There ought to be some way of finding out.

He tried looking down once more and was rewarded with a blurry view of a long, narrow strip of mottled green and brown,

moving sluggishly along the dry stream bed they had been crossing for the last hour or more. Twigs and shreds of dry vegetable matter were stuck to the dusty, translucent surface.

He was improving; the last time, he had only been able to see the thinnest possible edge of his new body.

When he looked up again, the far side of the stream bed was perceptibly closer. There was a cluster of stiff-looking, dark-brown vegetable shoots just beyond, on the rocky shoulder; George was aiming slightly to the left of it. It had been a plant very much like that one that he'd been reaching for when he lost his balance and got himself into this situation.

He might as well have a good look at it, anyhow.

The plant would probably turn out to be of little interest. It would be out of all reason to expect every new life-form to be a startling novelty; and George Meister was convinced that he had already stumbled into the most interesting organism on this planet. Something-or-other *meisterii*, he thought, named after him, of course. He had not settled on a generic term—he would have to learn more about it before he decided—but *meisterii* certainly. It was his discovery and nobody could take it away

from him. Or, unhappily, him away from it. Ah, well!

IT was a really lovely organism, though. Primitive—less structure of its own than a jellyfish, and only on a planet with light surface gravity like this one could it ever have hauled itself up out of the sea. No brain, no nervous system at all, apparently. But it had the perfect survival mechanism. It simply let its rivals develop highly organized nervous tissue, sat in one place (looking exactly like a deposit of leaves and other clutter) until one of them fell into it, and then took all the benefit.

It wasn't parasitism, either. It was a true symbiosis, on a higher level than any other planet, so far as George knew, had ever developed. The captive brain was nourished by the captor; wherefore it served the captive's interest to move the captor toward food and away from danger. *You steer me, I feed you.* It was fair.

They were close to the plant, almost touching it. George inspected it. As he had thought, it was a common grass type.

Now his body was tilting itself up a ridge he knew to be low, although from his eye-level it looked tremendous. He climbed it laboriously and found himself looking down into still another

gully. This could probably go on indefinitely. The question was—did he have any choice?

He looked at the shadows cast by the low-hanging sun. He was heading approximately northwest, directly away from the encampment. He was only a few hundred meters away; even at a crawl, he could make the distance easily enough . . . if he turned back.

He felt uneasy at the thought and didn't know why. Then it struck him that his appearance was not obviously that of a human being in distress. The chances were that he looked like a monster which had eaten and partially digested one or more people.

If he crawled into camp in his present condition, it was a certainty that he would be shot at before any questions were asked, and only a minor possibility that narcotic gas would be used instead of a machine rifle.

No, he decided, he was on the right course. The idea was to get away from camp, so that he wouldn't be found by the relief party which was probably searching for him now. Get away, bury himself in the forest, and study his new body: find out how it worked and what he could do with it, whether there actually were others in it with him, and if so, whether there was any way

of communicating with them.

It would take a long time, he realized, but he could do it.

Limply, like a puddle of mush oozing over the edge of a tablecloth, George started down into the gully.

BRIEFLY, the circumstances leading up to George's fall into the Something-or-other *meis-terii* were as follows:

Until as late as the mid-twenty-first century, a game invented by the ancient Japanese was still played by millions in the eastern hemisphere of earth. The game was called *go*. Although its rules were almost childishly simple, its strategy included more permutations and was more difficult to master than chess.

Go was played at the height of development — just before the geological catastrophe that wiped out most of its devotees—on a board with nine hundred shallow holes, using small pill-shaped counters. At each turn, one of the two players placed a counter on the board, wherever he chose, the object being to capture as much territory as possible by surrounding it completely.

There were no other rules; and yet it had taken the Japanese almost a thousand years to work up to that thirty-by-thirty board, adding perhaps one rank and file per century. A hundred years

was not too long to explore all the possibilities of that additional rank and file.

At the time George Meister fell into the gelatinous green-and-brown monster, toward the end of the twenty-third century A. D., a kind of *go* was being played in a three-dimensional field which contained more than ten billion positions. The Galaxy was the board, the positions were star-systems, men were the counters. The loser's penalty was annihilation.

The Galaxy was in the process of being colonized by two opposing federations, both with the highest aims and principles. In the early stages of this conflict, planets had been raided, bombs dropped, and a few battles had even been fought by fleets of spaceships. Later, that haphazard sort of warfare became impossible. Robot fighters, carrying enough armament to blow each other into dust, were produced by the trillion. In the space around the outer stars of a cluster belonging to one side or the other, they swarmed like minnows.

Within such a screen, planets were safe from attack and from any interference with their commerce . . . unless the enemy succeeded in colonizing enough of the surrounding star-systems to set up and maintain a second

screen outside the first. It was *go*, played for desperate stakes and under impossible conditions.

Everyone was in a hurry; everyone's ancestors for seven generations had been in a hurry. You got your education in a speeded-up, capsulized form. You mated early and bred frantically. And if you were assigned to an advance ecological team, as George was, you had to work without proper preparation.

The sensible, the obvious thing to do in opening up a new planet with unknown life-forms would have been to begin with at least ten years of immunological study conducted from the inside of a sealed station. After the worst bacteria and viruses had been conquered, you might proceed to a little cautious field work and exploration. Finally — total elapsed time fifty years, say — the colonists would be shipped in.

There simply wasn't that much time.

FIVE hours after the landing, Meister's team had unloaded fabricators and set up barracks enough to house its 2,628 members.

An hour after that, Meister, Gumbs, Bellis and McCarty had started out across the level cinder and ash left by the transport's tail jets to the nearest living vegetation, six hundred

meters away. They were to trace a spiral path outward from the camp site to a distance of a thousand meters, and then return with their specimens—providing nothing too large and hungry to be stopped by machine rifle had previously eaten them.

Meister, the biologist, was so hung down with collecting boxes that his slender torso was totally invisible. Major Gumbs had a survival kit, binoculars and a machine rifle. Vivian Bellis, who knew exactly as much mineralogy as had been contained in the three-month course prescribed for her rating, and no more, carried a light rifle, a hammer and a specimen sack. Miss McCarty—no one knew her first name—had no scientific function. She was the group's Loyalty Monitor. She wore two squat pistols and a bandolier bristling with cartridges. Her only job was to blow the cranium off any team member caught using an unauthorized communicator, or in any other way behaving oddly.

All of them were heavily gloved and booted, and their heads were covered by globular helmets, sealed to their tunic collars. They breathed through filtered respirators, so finely meshed that—in theory—nothing larger than an oxygen molecule could get through.

On their second circuit of the

camp, they had struck a low ridge and a series of short, steep gullies, most of them choked with the dusty-brown stalks of dead vegetation. As they started down into one of these, George, who was third in line—Gumbs leading, then Bellis, and McCarty behind George—stepped out onto a protruding slab of stone to examine a cluster of plant stalks rooted on its far side.

His weight was only a little more than twenty kilograms on this planet, and the slab looked as if it were firmly cemented into the wall of the gully. Just the same, he felt it shift under him as soon as his weight was fully on it. He found himself falling, shouted, and caught a flashing glimpse of Gumbs and Bellis, standing as if caught by a high-speed camera. He heard a rattling of stones as he went by. Then he saw what looked like a shabby blanket of leaves and dirt floating toward him, and he remembered thinking, *It looks like a soft landing, anyhow. . . .*

That was all, until he woke up feeling as if he had been prematurely buried, with no part of him alive but his eyes.

MUCH later, his frantic efforts to move had resulted in the first fractional success. From then on, his field of vision had advanced fairly steadily, per-

haps a meter every fifty minutes, not counting the times when someone else's efforts had interfered with his own.

His conviction that nothing remained of the old George Meister except a nervous system was not supported by observation, but the evidence was regrettably strong. To begin with, the anesthesia of the first hours had worn off, but his body was not reporting the position of the torso, head and four limbs he had formerly owned. He had, instead, a vague impression of being flattened and spread out over an enormous area. When he tried to move his fingers and toes, the response he got was so multiplied that he felt like a centipede.

He had no sense of cramped muscles, such as would normally be expected after a long period of paralysis — *and he was not breathing*. Yet his brain was evidently being well supplied with food and oxygen; he felt clear-headed, at ease and healthy.

He wasn't hungry, either, although he had been using energy steadily for a long time. There were, he thought, two possible reasons for that, depending on how you looked at it. One, that he wasn't hungry because he no longer had any stomach lining to contract; two, that he wasn't hungry because the organism he

was riding in had been well nourished by the superfluous tissues George had contributed.

Two hours later, when the sun was setting, it began to rain. George saw the big, slow-falling drops and felt their dull impacts on his "skin." He didn't know whether rain would do him any damage or not, but crawled under a bush with large, fringed leaves just to be on the safe side. When the rain stopped, it was night and he decided he might as well stay where he was until morning. He did not feel tired, and it occurred to him to wonder whether he still needed to sleep. He composed himself as well as he could to wait for the answer.

He was still wakeful after a long time had passed, but had made no progress toward deciding whether this answered the question or prevented it from being answered, when he saw a pair of dim lights coming slowly and erratically toward him.

GEORGE watched them with an attentiveness compounded of professional interest and apprehension. Gradually, as they came closer, he made out that the lights were attached to long, thin stalks which grew from an ambiguous shape below—either light organs, like those of some deep-sea fish, or simply luminescent eyes.

George noted a feeling of tension in himself which seemed to suggest that adrenalin or an equivalent was being released somewhere in his system. He promised himself to follow this lead at the first possible moment; meanwhile, he had a more urgent problem to consider. Was this approaching organism the kind which the Something *meisterii* ate, or the kind which devoured the Something *meisterii*? If the latter, what could he do about it?

For the present, at any rate, sitting where he was seemed to be indicated. The body he inhabited made use of camouflage in its normal, or untenanted state, and was not equipped for speed. So George held still and watched, keeping his eyes half-closed, while he considered the possible nature of the approaching animal.

The fact that it was nocturnal, he told himself, meant nothing. Moths were nocturnal; so were bats—no, the devil with bats, they were carnivores.

The light-bearing creature came nearer, and George saw the faint gleam of a pair of long, narrow eyes below the two stalks.

Then the creature opened its mouth.

It had a great many teeth.

George found himself crammed into some kind of crevice in a wall of rock, without any clear

recollection of how he had got there. He remembered a flurry of branches as the creature sprang at him, and a moment's furious pain, and nothing but vague, starlit glimpses of leaves and soil.

How had he got away?

He puzzled over it until dawn came, and then, looking down at himself, he saw something that had not been there before. Under the smooth edge of gelatinous flesh, three or four projections of some kind were visible. It struck George that his sensation of contact with the stone underneath him had changed, too. He seemed to be standing on a number of tiny points instead of lying flat.

He flexed one of the projections experimentally, then thrust it out straight ahead of him. It was a lumpy, single-jointed caricature of a finger or a leg.

II

LYING still for a long time, George Meister thought about it with as much coherence as he could muster. Then he waggled the limb again. It was there, and so were all the others, as solid and real as the rest of him.

He moved forward experimentally, sending the same messages down to his finger-and-toe nerve-ends as before. His body lurched out of the cranny with a swift-

ness that very nearly tumbled him down over the edge of a minor precipice.

Where he had crawled like a snail before, he now scuttled like an insect.

But how? No doubt, in his terror when the thing with the teeth attacked, he had unconsciously tried to run as if he still had legs. Was that all there was to it?

George thought of the carnivore again, and of the stalks supporting the organs which he had thought might be eyes. That would do as an experiment. He closed his eyes and imagined them rising outward, imagined the mobile stalks growing, growing . . . He tried to convince himself that he had eyes like that, had always had them, that everyone who was anyone had eyes on stalks.

Surely, something was happening.

George opened his eyes again and found himself looking straight down at the ground, getting a view so close that it was blurred, out of focus. Impatiently, he tried to look up. All that happened was that his field of vision moved forward a matter of ten or twelve centimeters.

It was at this point that a voice shattered the stillness. It sounded like someone trying to shout through half a meter of

lard. "Urghh! Lluhh! Eeraghh!"

George leaped convulsively, executed a neat turn and swept his eyes around a good two hundred and forty degrees of arc. He saw nothing but rocks and lichens. On a closer inspection, it appeared that a small green and orange larva or grub of some kind was moving past him. George regarded it with suspicion for a long moment, until the voice broke out again:

"Elffff! Elffneee!"

The voice, somewhat higher this time, came from behind. George whirled again, swept his eyes around—

Around an impossibly wide circuit. His eyes were on stalks, and they were mobile whereas a moment ago he had been staring at the ground, unable to look up. George's brain clattered into high gear. He had grown stalks for his eyes, all right, but they'd been limp, just extensions of the jellylike mass of his body, without a stiffening cell-structure or muscular tissue to move them. Then, when the voice had startled him, he'd got the stiffening and the muscles in a hurry.

That must have been what had happened the previous night. Probably the process would have been completed, but much more slowly, if he hadn't been frightened. A protective mechanism, obviously. As for the voice—

GEORGE rotated once more, slowly, looking all around him. There was no question about it; he was alone. The voice, which had seemed to come from someone or something standing just behind him, must in fact have issued from his own body.

The voice started again, at a less frantic volume. It burbled a few times, then said quite clearly in a high tenor, "Whass happen? Whem am I?"

George was floundering in enough bewilderment. He was in no condition to adapt quickly to more new circumstances, and when a large, dessicated lump fell from a nearby bush and bounced soundlessly to within a meter of him, he simply stared at it.

He looked at the hard-shelled object and then at the laden bush from which it had dropped. Slowly, painfully, he worked his way through to a logical conclusion. The dried fruit had fallen without a sound. This was natural, because he had been totally deaf ever since his metamorphosis. But he had heard a voice!

Ergo, hallucination or telepathy.

The voice began again. "Help! Oh, dear, I wish someone would answer!"

Vivian Bellis. Gumbs, even if he affected that tenor voice, wouldn't say, "Oh, dear." Neither would Miss McCarty.

George's shaken nerves were returning to normal. He thought intently, *I get scared, grow legs. Bellis gets scared, grows a telepathic voice. That's reasonable, I guess—her first and only impulse would be to yell.*

George tried to put himself into a yelling mood. He shut his eyes and imagined himself cooped up in a terrifyingly alien medium, without any control or knowledge of his predicament. He tried to shout: "Vivian!"

He went on trying, while the girl's voice continued at intervals. Finally she stopped abruptly in the middle of a sentence.

George said, "Can you hear me?"

"Who's that? What do you want?"

"This is George Meister, Vivian. Can you understand what I'm saying?"

"What—"

George kept at it. His pseudo-voice, he judged, was a little garbled, just as Bellis's had been at first. At last the girl said, "Oh, George—I mean Mr. Meister! Oh, I've been so frightened. Where are you?"

George explained, apparently not very tactfully, because Bellis shrieked when he was through and then went back to burbling.

George sighed, and said, "Is there anyone else on the premises? Major Gumbs? Miss Mc-

Carty? Can you hear me?"

A few minutes later two sets of weird sounds began almost simultaneously. When they became coherent, it was no trouble to identify the voices.

Gumbs, the big, red-faced professional soldier, shouted, "Why the hell don't you watch where you're going, Meister? If you hadn't started that rock-slide, we wouldn't be in this mess!"

Miss McCarty, who had a grim white face, a jutting jaw, and eyes the color of mud, said coldly, "Meister, all of this will be reported. *All* of it."

IT appeared that only Meister and Gumbs had kept the use of their eyes. All four of them had some muscular control, though Gumbs was the only one who had made any serious attempt to interfere with George's locomotion. Miss McCarty, not to George's surprise, had managed to retain a pair of functioning ears.

But Bellis had been blind, deaf and dumb all through the afternoon and night. The only terminal sense-organs she had been able to use had been those of the skin—the perceptors of touch, heat and cold, and pain. She had heard nothing, seen nothing, but she had felt every leaf and stalk they had brushed against, the cold impact of every rain drop,

and the pain of the toothy monster's bite. George's opinion of her went up several notches when he learned this. She had been terrified, but she hadn't been driven into hysteria or insanity.

It further appeared that nobody was doing any breathing and nobody was aware of a heartbeat.

George would have liked nothing better than to continue this discussion, but the other three were united in believing that what had happened to them after they got in was of less importance than how they were going to get out.

"We can't get out," said George. "At least, I don't see any possibility of it in the present state of our knowledge. If we—"

"But we've got to get out!" Vivian cried.

"We'll go back to camp," said McCarty coldly. "Immediately. And you'll explain to the Loyalty Committee why you didn't return as soon as you regained consciousness."

"That's right," Gumbs put in self-consciously. "If you can't do anything, Meister, maybe the other technical fellows can."

George patiently explained his theory of their probable reception by the guards at the camp. McCarty's keen mind detected a flaw. "You grew legs, and stalks for your eyes, according to your

own testimony. If you aren't lying, you can also grow a mouth. We'll announce ourselves as we approach."

"That may not be easy," George told her. "We couldn't get along with just a mouth. We'd need teeth, tongue, hard and soft palates, lungs or the equivalent, vocal cords, and some kind of substitute for a diaphragm to power the whole business. I'm wondering if it's possible at all, because when Miss Bellis finally succeeded in making herself heard, it was by the method we're using now. She didn't—"

"You talk too much," McCarty interrupted. "Major Gumbs, Miss Bellis, you and I will try to form a speaking apparatus. The first to succeed will receive a credit mark on his record. Commence."

GEORGE, being left out of the contest by implication, used his time trying to restore his hearing. It seemed to him likely that the Whatever-it-was *meisterii* had some sort of division of labor built into it, since Gumbs and he—the first two to fall in—had kept their sight without making any special effort, while matters like hearing and touch had been left for the latecomers. This was fine in principle, and George approved of it, but he didn't like the idea of Miss McCarty's being

the sole custodian of any part of the apparatus whatever.

Even if he were able to persuade the other two to follow his lead—and at the moment this prospect seemed dim—McCarty was certain to be a holdout. And it might easily be vital to all of them, at some time in the near future, to have their hearing hooked into the circuit.

He was distracted at first by muttered comments between Gumbs and Vivian — "Getting anywhere?" "I don't think so. Are you?"—interspersed between yawns, humming sounds and other irritating noises as they tried unsuccessfully to switch over from mental to vocal communication. Finally McCarty snapped, "Concentrate on forming the necessary organs instead of braying like jackasses."

George settled down to work, using the same technique he had found effective before. With his eyes shut, he imagined that the thing with all the teeth was approaching in darkness — *tap; slither; tap; click*. He wished valiantly for ears to catch those faint approaching sounds. After a long time he thought he was beginning to succeed — or were those mental sounds, unconsciously emitted by one of the other three? *Click. Slither. Swish. Scrape.*

George opened his eyes, gen-

uinely alarmed. A hundred meters away, facing him across the shallow slope of rocky ground, was a uniformed man just emerging from a stand of black vegetation spears. As George raised his eye-stalks, the man paused, stared back at him, then shouted and raised his rifle.

George ran. Instantly there was a babble of voices inside him, and the muscles of his "legs" went into wild spasms.

"Run, dammit!" he said frantically. "There's a trooper with—"

The rifle went off with a deafening roar and George felt a sudden hideous pain aft of his spine. Vivian Bellis screamed. The struggle for possession of their common legs stopped and they scuttled full speed ahead for the cover of a nearby boulder.

The rifle roared again. George heard rock splinters screeching through the foliage overhead. Then they were plunging down the side of a gully, up the other slope, over a low hummock and into a forest of tall, bare-limbed trees.

George spotted a leaf-filled hollow and headed for it, fighting somebody else's desire to keep on running in a straight line. They plopped into the hollow and crouched there while three running men went past them.

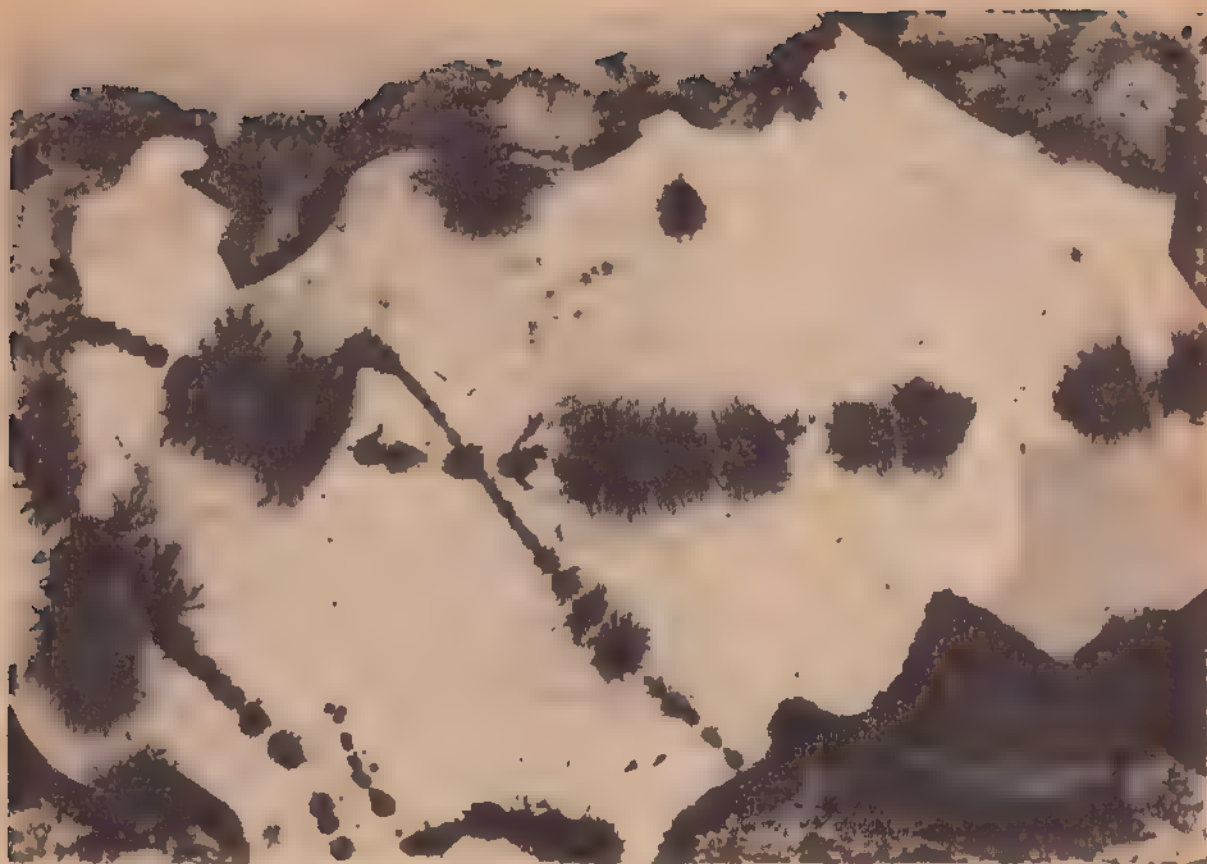
VIVIAN was moaning steadily. Raising his eye-stalks cautiously, George was able to see that several jagged splinters of stone had penetrated the monster's gelatinous flesh near the far rim. They had been very lucky. The shot had apparently been a near miss—accountable only on the grounds that the trooper had been shooting downhill at a moving target—and had shattered the boulder behind them.

Looking more closely, George observed something which excited his professional interest. The whole surface of the monster appeared to be in constant slow ferment, tiny pits opening and closing as if the flesh were boiling . . . except that here the bubbles of air were not forcing their way outward, but were being engulfed at the surface and pressed down into the interior.

He could also see, deep under the mottled surface of the huge lens-shaped body, four vague clots of darkness which must be the living brains of Gumbs, Bellis, McCarty—and Meister.

Yes, there was one which was radially opposite his own eye-stalks. It was an odd thing, George reflected, to be looking at your own brain. He hoped he could get used to it in time.

The four dark spots were arranged close together in an al-



most perfect square at the center of the lens. The spinal cords, barely visible, crossed between them and rayed outward from the center.

Pattern, George thought. The thing was designed to make use of more than one nervous system. It arranged them in an orderly fashion, with the brains inward for greater protection—and perhaps for another reason. Maybe there was even a provision for conscious cooperation among the passengers: a matrix that somehow promoted the growth of com-

munication cells between the separate brains. If that were so, it would account for their ready success with telepathy. George wished acutely that he could get inside and find out.

Vivian's pain was diminishing. Hers was the brain opposite George's and she had taken most of the effect of the rock splinters. But the fragments were sinking now, slowly, through the gelid substance of the monster's tissues. Watching carefully, George could see them move. When they got to the bottom,



they would be excreted, no doubt, just as the indigestible parts of their clothing and equipment had been.

George wondered idly which of the remaining two brains was McCarty's and which was Gumb's. The answer proved easy to find. To George's left, as he looked back toward the center of the mound, was a pair of blue eyes set flush with the surface. They had lids apparently grown from the monster's substance, but thickened and opaque.

To his right, George could

make out two tiny openings, extending a few centimeters into the body, which could only be Miss McCarty's ears. George had an impulse to see if he could devise a method of dropping dirt into them.

Anyhow, the question of returning to camp had been settled, at least for the moment. McCarty said nothing more about growing a set of speech organs, although George was sure she was determined to keep on trying.

He didn't think she would suc-

ceed. Whatever the mechanism was by which these changes in bodily structure were accomplished, amateurs like themselves probably could succeed only under the pressure of considerable emotional strain, and then just with comparatively simple tasks which involved one new structure at a time. And as he had already told McCarty, the speech organs in Man were extraordinarily diverse and complicated.

IT occurred to George that speech might be achieved by creating a thin membrane to serve as a diaphragm, and an air chamber behind it, with a set of muscles to produce the necessary vibrations and modulate them. He kept the notion to himself, though, because he didn't want to go back.

George was a rare bird: a scientist who was actually fitted for his work and loved it for its own sake. And right now he was sitting squarely in the middle of the most powerful research tool that had ever existed in his field: a protean organism, with the observer *inside* it, able to order its structure and watch the results; able to devise theories of function and test them on the tissues of what was effectively his own body—able to construct new organs, new adaptations to environment!

George saw himself at the point of an enormous cone of new knowledge and some of the possibilities he glimpsed humbled and awed him.

He *couldn't* go back, even if it were possible to do it without getting killed. If only he alone had fallen in — No, then the others would have pulled him out and killed the monster.

There were, he felt, too many problems demanding solutions all at once. It was hard to concentrate; his mind kept slipping maddeningly out of focus.

Vivian, whose pain had stopped some time ago, began to wail again. Gumbs snapped at her. McCarty cursed both of them. George himself felt that he had had very nearly all he could take, cooped up with three idiots who had no more sense than to squabble among themselves.

"Wait a minute," he said. "Do you all feel the same way? Irritable? Jumpy? As if you'd been working for sixty hours straight and were too tired to sleep?"

"Stop talking like a video ad," Vivian said angrily. "Haven't we got enough trouble without—"

"We're hungry," George interrupted. "We didn't realize it, because we haven't got the organs that usually signal hunger. But the last thing this body ate was us, and that was a whole day ago. We've got to find something

to ingest. And soon, I'd say."

"Good Lord, you're right," said Gumbs. "But if this thing only eats people—I mean to say—"

"It never met people until we landed," George replied curtly. "Any protein should do."

He started off in what he hoped was the direction they had been following all along—directly away from camp. At least, he thought, if they put enough distance behind them, they might get thoroughly lost.

III

THEY moved out of the trees and down the long slope of a valley, over a wiry carpet of dead grasses, until they reached a watercourse in which a thin trickle was still flowing. Far down the bank, partly screened by clumps of skeletal shrubbery, George saw a group of animals that looked vaguely like miniature pigs. He told the others about it, and started cautiously in that direction.

"Which way is the wind blowing, Vivian?" he asked. "Can you feel it?"

She said, "No. I could before, when we were going downhill, but now I think we're facing into it."

"Good. We may be able to sneak up on them."

"But we're not going to eat *animals*, are we?"

"Yes, how about it, Meister?" Gumbs put in. "I don't say I'm a squeamish fellow, but after all—"

George, who felt a little squeamish himself—like all the others, he had been brought up on a diet of yeasts and synthetic protein—said testily, "What else can we do? You've got eyes; you can see that it's autumn here. Autumn after a hot summer, at that. Trees bare, streams dried up. We eat meat or go without—or would you rather hunt for insects?"

Gumbs, shocked to the core, muttered for a while and then gave up.

Seen at closer range, the animals looked less porcine and even more unappetizing than before. They had lean, segmented, pinkish-gray bodies, four short legs, flaring ears, and blunt scimitar-like snouts with which they were rooting in the ground, occasionally turning up something which they gulped, ears flapping.

George counted thirty of them, grouped fairly closely in a little space of clear ground between the bushes and the river. They moved slowly, but their short legs looked powerful; he guessed that they could run fast enough when they had to.

He inched forward, keeping his

eye-stalks low, stopping instantly whenever one of the beasts looked up. Moving with increasing caution, he had approached to within ten meters of the nearest when McCarty said abruptly:

"Meister, has it occurred to you to wonder just how we are going to eat these animals?"

"Don't be foolish," he said irritably. "We'll just—" He stopped, baffled.

DID the thing's normal method of assimilation stop as soon as it got a tenant? Were they supposed to grow fangs and a gullet and all the rest of the apparatus? Impossible; they'd starve to death first. But on the other hand—*damn* this fuzzy-headed feeling—wouldn't it have to stop, to prevent the tenant from being digested with his first meal?

"Well?" McCarty demanded.

That guess was wrong, George knew, but he couldn't say why; and it was a distinctly unpleasant thought. Or, even worse, suppose the meal became the tenant, and the tenant the meal?

The nearest animal's head went up, and four tiny red eyes stared directly at George. The floppy ears snapped to attention. It was no time for speculation.

"He's seen us!" George shouted mentally. "*Run!*"

One instant they were lying

still in the prickly dry grass; the next they were skimming across the ground, with the herd galloping away straight ahead of them. The hams of the nearest beast loomed up closer and closer, bounding furiously; then they had run it down and vaulted over it.

Casting an eye backward, George saw that it was lying motionless in the grass—unconscious or dead.

They ran down another one. *The anesthetic*, George thought lucidly. *One touch does it.* And another, and another. *Of course we can digest them*, he thought, with relief. *It has to be selective to begin with or it couldn't have separated out our nervous tissue.*

Four down. Six down. Three more together as the herd bunched between the last arm of the thicket and the steep river-bank; then two that tried to double back; then four stragglers, one after the other.

The rest of the herd disappeared into the tall grass up the slope, but fifteen bodies were strewn behind them.

TAKING no chances, George went back to the beginning of the line and edged the monster's body under the first carcass.

"Crouch down, Gumbs," he said. "We have to slide under it

... that's far enough. Leave the head hanging over."

"What for?" barked the soldier.

"You don't want his brain in here with us, do you? We don't know how many this thing is equipped to take. It might even like this one better than any of ours. But I can't see it bothering to keep the rest of the nervous system, if we make sure not to eat the head."

"Oh!" said Vivian.

"I beg your pardon, Miss Bellis," George said contritely. "It shouldn't be too unpleasant, though, if we don't let it bother us. It isn't as if we had taste buds or—"

"It's all right," she said. "Just please let's not talk about it."

"I should think not," Gumbs put in. "A little more tact, don't you think, Meister?"

Accepting this reproof, George turned his attention to the corpse that lay on the monster's glabrous surface, between his section and Gumbs's. It was sinking, just visibly, into the flesh. A cloud of opacity was spreading around it.

When it was almost gone and the neck had been severed, they moved on to the next. This time, at George's suggestion, they took aboard two at once. Gradually their irritable mood faded; they began to feel at ease and cheerful,

and George found it possible to think consecutively without having vital points slip out of his reach.

They were on their eighth and ninth courses, and George was happily engaged in an intricate chain of speculation as to the monster's circulatory system, when Miss McCarty broke a long silence to announce:

"I have now perfected a method by which we can return to camp safely. We will begin at once."

STARTLED and dismayed, George turned his eyes toward McCarty's quadrant of the monster. Protruding from the rim was a stringy, jointed something that looked like—yes, it was!—a grotesque but recognizable arm and hand. As he watched, the lumpy fingers fumbled with a blade of grass, tugged, uprooted it.

"Major Gumbs!" said McCarty. "It will be your task to locate the following articles as quickly as possible. One, a surface suitable for writing. I suggest a large leaf, light in color, dry but not brittle, or a tree from which a large section of bark can be easily peeled. Two, a pigment. No doubt you will be able to discover berries yielding suitable juice. If not, mud will do. Three, a twig or reed for use as a pen.

When you have directed me to all these essential items, I will employ them to write a message outlining our predicament. You will read the result and point out any errors, which I will then correct. When the message is completed, we will return with it to the camp, approaching at night, and deposit it in a conspicuous place. We will retire until daybreak, and when the message has been read, we will approach again. Begin, Major."

"Well, yes," said Gumbs, "that ought to work, except—I suppose you've figured out some system for holding the pen, Miss McCarty?"

"Fool!" she replied. "I have made a hand, of course."

"Well, in that case, by all means. Let's see, I believe we might try this thicket first—" Their common body gave a lurch in that direction.

George held back. "Wait a minute," he said desperately. "Let's at least have the common sense to finish this meal before we go. There's no telling when we'll get another."

McCarty demanded, "How large are these creatures, Major?"

"About sixty centimeters long, I should say."

"And we have consumed nine of them, is that correct?"

"Nearer eight," George cor-

rected. "These two are only half gone."

"In other words," McCarty said, "we have had two apiece. That should be ample. Don't you agree, Major?"

George said earnestly, "Miss McCarty, you're thinking in terms of human food requirements, whereas this organism has a different metabolic rate and at least three times the mass of four human beings. Look at it this way—the four of us together had a mass of about three hundred kilos, and yet twenty hours after this thing absorbed us, it was hungry again. Well, these animals wouldn't weigh much more than twenty kilos apiece at one G—and according to your scheme, we've got to hold out until after daybreak tomorrow."

"Something in that," Gumbs agreed. "Yes, on the whole, Miss McCarty, I think we had better forage while we can. It won't take us more than half an hour longer, at this rate."

"Very well. Be as quick as you can, though."

THEY moved on to the next pair of victims. George's brain was working furiously. It was no good arguing with McCarty. If he could only convince Gumbs, then Bellis would fall in with the majority—maybe. It was the only hope he had.

"Gumbs," he said, "have you given any thought to what's going to happen to us when we get back?"

"Not my line, you know. I leave that to the technical fellows like yourself."

"No, that isn't what I mean. Suppose you were the C. O. of this team, and four other people had fallen into this organism instead of us—"

"What? What? I don't follow."

George patiently repeated it.

"Yes, I see what you mean. So?"

"What orders would you give?"

Gumbs thought a moment. "Turn the thing over to the bio section, I suppose."

"You don't think you might specimen and so on. Handle with order it destroyed as a possible menace?"

"Good Lord, I suppose I might. No, but you see, we'll be careful what we say in the note. We'll point out that we're a valuable care."

"All right," George said, "suppose that works, then what? Since it's out of your line, I'll tell you. Nine chances out of ten, bio section will classify us as a possible biological enemy weapon. That means, first of all, that we'll go through a full-dress interrogation and I don't have to tell you what that can be like—"

"Major Gumbs," said McCarty

stridently, "Meister will be executed for disloyalty at the first opportunity. You are forbidden to talk to him, under the same penalty."

"But she can't stop you from listening to me," George said tensely. "In the second place, Gumbs, they'll take samples. Without anesthesia. Finally, they'll either destroy us just the same, or they'll send us back to the nearest strong point for more study. We will then be Federation property, Gumbs, in a top-secret category, and since nobody in Intelligence will ever dare to take the responsibility of clearing us, we'll stay there."

"Gumbs, this *is* a valuable specimen, but it will never do anybody any good if we go back to camp. Whatever we discover about it, even if it's knowledge that could save billions of lives, that will be top-secret, too, and it'll never get past the walls of Intelligence. . . . If you're still hoping that they can get you out of this, you're wrong. This isn't like limb grafts. *Your whole body has been destroyed*, Gumbs, everything but your nervous system and your eyes. The only new body we'll get is the one we make ourselves. We've got to stay here and—and work this out ourselves."

"Major Gumbs," said McCarty, "I think we have wasted quite

enough time. Begin your search for the materials I need."

FOR a moment, Gumbs was silent and their collective body did not move.

Then he said: "Miss McCarty—unofficially, of course—there's one point I'd like your opinion on. Before we begin. That is to say, they'll be able to patch together some sort of bodies for us, don't you think? I mean one technical fellow says one thing, another says the opposite. Do you see what I'm driving at?"

George had been watching McCarty's new limb uneasily. It was flexing rhythmically and, he was almost certain, gradually growing larger. The fingers groped in the dry grass, plucking first a single blade, then two together, finally a whole tuft. Now she said: "I have no opinion, Major. The question is irrelevant. Our duty is to return to camp. That is all we need to know."

"Oh, I quite agree with you there," said Gumbs. "And besides," he added, "there really isn't any alternative, is there?"

George, staring down at one of the fingerlike projections visible below the rim of the monster, was passionately willing it to turn into an arm. He had, he suspected, started much too late.

"The alternative," he said, "is simply to keep on going as we

are. Even if the Federation holds this planet for a century, there'll be places on it that will never be explored. We'll be safe."

"I mean to say," Gumbs went on as if he had only paused for thought, "a fellow can't very well cut himself off from civilization, can he?" There was a thoughtful tone to his voice.

Again George felt a movement toward the thicket; again he resisted it. Then he found himself overpowered as another set of muscles joined themselves to Gumbs's. Quivering, crabwise, the Something-or-other *meisterii* moved half a meter. Then it stopped, straining.

"I believe you, Mr. Meister—George," Vivian Bellis said. "I don't want to go back. Tell me what you want me to do."

"You're doing beautifully right now," George assured her after a speechless instant. "Except if you can grow an arm, I imagine that will be useful."

"Now we know where we stand," said McCarty to Gumbs.

"Yes. Quite right."

"Major Gumbs," she said crisply, "you are opposite me, I believe?"

"Am I?" asked Gumbs doubtfully.

"Never mind. I believe you are. Now is Meister to your right or left?"

"Left. I know that, anyhow.

Can see his eye-stalks out of the corner of my eye."

"Very well." McCarty's arm rose, with a sharp-pointed fragment of rock clutched in the blobby fingers.

HORRIFIED, George watched it bend backward across the curve of the monster's body. The long, knife-sharp point probed tentatively at the surface three centimeters short of the area over his brain. Then the fist made an abrupt up-and-down movement and a fierce stab of pain shot through him.

"Not quite long enough, I think," McCarty said. She flexed the arm, then brought it back. "Major Gumbs, after my next attempt, you will tell me if you notice any reaction in Meister's eye-stalks."

The pain was still throbbing along George's nerves. With one half-blinded eye, he watched the embryonic arm that was growing, too slowly, under the rim; with the other, fascinated, he watched McCarty's arm lengthen slowly toward him.

It was growing visibly, he suddenly realized, but it wasn't getting any nearer. In fact, incredibly enough, it seemed to be losing ground.

The monster's flesh was flowing away under it, expanding in both directions.

McCarty stabbed again, with vicious strength. This time the pain was less acute.

"Major?" she asked. "Any result?"

"No," said Gumbs, "no, I think not. We seem to be moving forward a bit, though, Miss McCarty."

"A ridiculous error," she replied. "We are being forced back. Pay attention, Major."

"No, really," he protested. "That is to say, we're moving toward the thicket. Forward to me, backward to you."

"Major Gumbs, *I* am moving forward, *you* are moving back."

They were both right, George discovered. The monster's body was no longer circular; it was extending itself along the axis. A suggestion of concavity was becoming visible in the center. Below the surface, too, there was motion.

The four brains now formed an oblong, not a square.

The positions of the spinal cords had shifted. His own and Vivian's seemed to be about where they were, But Gumbs's now passed under McCarty's brain, and vice versa.

Having increased its mass by some two hundred kilos, the Something-or-other *meisterii* was fissioning into two individuals—and tidily separating its tenants, two to each. Gumbs and Meister

in one; McCarty and Bellis in the other.

NEXT time it happened, he realized, each product of the fission would be reduced to one brain—and the time after that, one of the new individuals out of each pair would be a monster in the primary state, quiescent, camouflaged, waiting to be stumbled over.

But that meant that, like the common ameba, this fascinating organism was immortal, barring accidents. It simply grew and divided.

Not the tenants, though, unfortunately. Their tissues would wear out and die.

Or would they? Human nervous tissue didn't regenerate, but neither did it proliferate as George's and Miss McCarty's had done; neither did any human tissue build new cells fast enough to account for George's eye-stalks or Miss McCarty's arm.

There was no question about it: none of that new tissue could possibly be human; it was all counterfeit, produced by the monster from its own substance according to the structural "blue-prints" in the nearest genuine cells. And it was a perfect counterfeit: the new tissues knit with the old, axones coupled with dendrites, muscles contracted or expanded on command.

And therefore, when nerve cells wore out, they could be replaced. Eventually the last human cell would go, the human tenant would have become totally monster—but "a difference that makes no difference is no difference." Effectively, the tenant would still be human and he would be immortal.

Barring accidents.

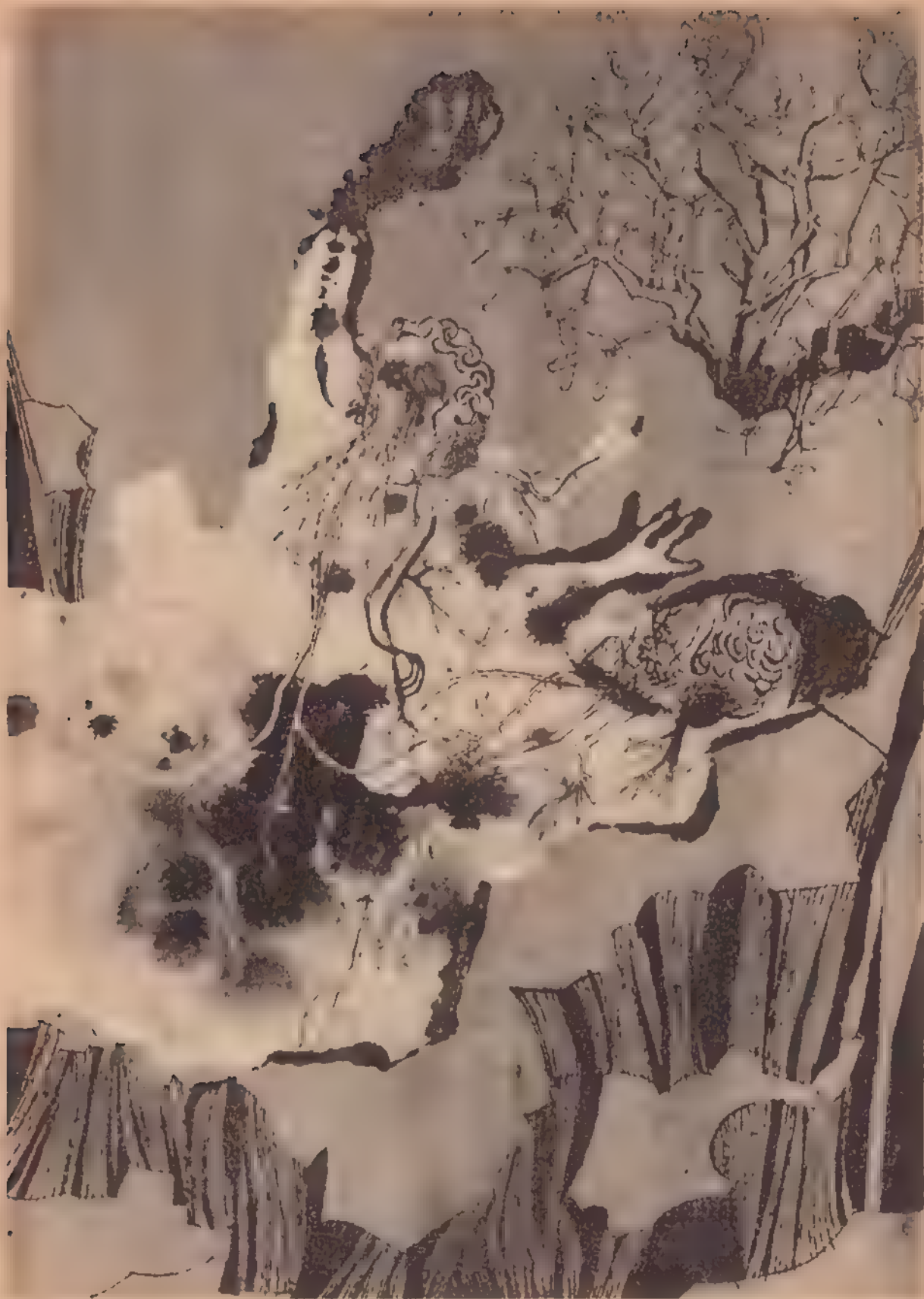
Or murder.

Miss McCarty was saying, "Major Gumbs, you are being ridiculous. The explanation is quite obvious. Unless you are deliberately deceiving me, for what reason I cannot imagine, then our efforts to move in opposing directions must be pulling this creature apart."

McCarty was evidently confused in her geometry. Let her stay that way—it would keep her off balance until the fission was complete. No, that was no good. George himself was out of her reach already and getting farther away, but how about Bellis? Her brain and McCarty's were, if anything, closer together . . .

WHAT was he to do? If he warned the girl, that would only draw McCarty's attention to her sooner.

There wasn't much time left, he realized abruptly. If some physical linkage between the brains actually had occurred to



make communication possible, those cells couldn't hold out much longer; the gap between the two pairs of brains was widening steadily. He had to keep McCarty from discovering how the four of them would be paired.

"Vivian!" he said.

"Yes, George?"

"Listen, we're not pulling this body apart. It's splitting. That's the way it reproduces. You and I will be in one half, Gumbs and McCarty in the other," he lied convincingly. "If they don't give us any trouble, we can all go where we please."

"Oh, I'm so glad!" What a warm voice she had . . .

"Yes," said George nervously, "but we may have to fight them; it's up to them. So *grow an arm, Vivian.*"

"I'll try," she said uncertainly.

McCarty's voice cut across hers. "Major Gumbs, since you have eyes, it will be your task to see to it that those two do not escape. Meanwhile, I suggest that you also grow an arm."

"Doing my best," said Gumbs.

Puzzled, George glanced downward, past his own half-formed arm. There, almost out of sight, a fleshy bulge appeared under Gumbs's section of the rim! The Major had been working on it in secret, keeping it hidden . . . and it was already better-developed than George's.

"Oh-oh," said Gumbs abruptly. "Look here, Miss McCarty, Meister's been leading you up the garden path. Deceiving you, you understand. Clever, I must say. I mean you and I aren't going to be in the same half. How could we be? We're on *opposite sides* of the blasted thing. It's going to be you and Miss Bellis, me and Meister."

The monster was developing a definite waistline. The spinal cords had rotated now, so that there was clear space between them in the center.

"Yes," said McCarty faintly. "Thank you, Major Gumbs."

"George!" came Vivian's frightened voice, distant and weak. "What shall I do?"

"Grow an arm!" he shouted. There was no reply.

IV

FROZEN, George watched McCarty's arm, the rock-fragment still clutched at the end of it, rise into view and swing leftward at full stretch over the bubbling surface of the monster. He had time to see it bob up and viciously down again; time to think. *Still short, thank God—that's McCarty's right arm, it's farther from Vivian's brain than it was from mine;* time, finally, to realize that he could not possibly help Vivian before McCarty

lengthened the arm the few centimeters more that were necessary. The fission was only half complete, yet he could no more move to where he wanted to be than a Siamese twin could walk around his brother.

Then his time was up. A flicker of motion warned him, and he looked back to see a lumpy, distorted pseudo-hand clutching for his eye-stalks.

Instinctively he brought his own up, grasped the other's wrist and hung on desperately. It was half again the size of his, and so strongly muscled that although his leverage was better, he couldn't force it back or hold it away. He could only keep the system oscillating up and down, adding his strength to Gumbs's so that the mark was overshot.

Gumbs began to vary the force and rhythm of his movements, trying to catch him off guard. A thick finger brushed the base of one eye-stalk.

"Sorry about this, Meister," said Gumbs. "No hard feelings, you understand. Between us (oof) I don't fancy that McCarty woman much—but (ugh! almost had you that time) way I see it, I've got to look after myself. Mean to say (ugh) if I don't, who will? See what I mean?"

George did not reply. Astonishingly enough, he was no longer

afraid, either for himself or for Vivian; he was simply overpoweringly, ecstatically, monomaniacally angry. Power from somewhere was surging into his arm. Fiercely concentrating, he thought *Bigger! Stronger! Longer! More arm!*

The arm grew. Visibly, it added substance to itself, it lengthened, thickened, bulked with muscle. So did Gumbs's, however.

He began another arm. So did Gumbs.

All around him the surface of the monster was bubbling violently. And, George realized, the lenticular bulk of it was perceptibly shrinking. Its curious breathing system was inadequate; the thing was cannibalizing itself, destroying its own tissues to make up the difference.

How small could it get and still support two human tenants?

And which brain would it dispend with first?

He had no leisure to think about it. Scrabbling in the grass with his second hand, Gumbs had failed to find anything that would serve as a weapon. Now, with a sudden lurch, he swung their entire body around.

The fission was complete.

That thought reminded George of Vivian and McCarty. He risked a split-second's glance behind him, saw nothing but a

featureless ovoid mound, and looked back in time to see Gumbs's half-grown right fist pluck up a long, sharp-pointed dead branch and drive it murderously at his eyes.

THE lip of the river-bank was a meter away to the left. George made it in one abrupt surge. Their common body slipped, tottered, hesitated, hands clutching wildly—and toppled, end over end, hurtling in a cloud of dust and pebbles down the breakneck slope to a meaty smash at the bottom.

The universe made one more giant turn around them and came to rest. Half-blinded, George groped for the hold he had lost, found the wrist and seized it.

"Oh, Lord!" said Gumbs. "I'm hurt, Meister. Go on, man, finish it, will you? Don't waste time."

George stared at him suspiciously, without relaxing his grip. "What's the matter with you?"

"Paralyzed. I can't move."

They had fallen onto a small boulder, George saw, one of many with which the river-bed was strewn. This one was roughly conical; they were draped over it, and the blunt point was directly under Gumbs's spinal cord, a few centimeters from the brain.

"Gumbs, that may not be as bad as you think. If I can show you it isn't, will you give up and

put yourself under my orders?"

"How do you mean? My spine's crushed."

"Never mind that now. Will you or won't you?"

"Why, yes," agreed Gumbs. "That's very decent of you, Meister, matter of fact. You have my word, for what it's worth."

"All right," said George. Straining hard, he managed to get their body off the boulder. Then he stared up at the slope down which they had tumbled. Too steep; he'd have to find an easier way back. He turned and started off to eastward, paralleling the thin stream that flowed in the center of the watercourse.

"What's up now?" Gumbs asked after a moment.

"We've got to find a way up to the top," George said impatiently. "I may still be able to help Vivian."

"Ah, yes. Afraid I was thinking about myself, Meister. If you don't mind telling me, what's the damage?"

SHE couldn't still be alive, George was thinking despondently, but if there were any small chance—

"You'll be all right," he said. "If you were still in your old body, that would be a fatal injury, or permanently disabling, anyhow, but not in this thing. You can repair yourself as easily

as you can grow a new limb."

"Stupid of me not to think of that," said Gumbs. "But does that mean we were simply wasting our time trying to kill one another?"

"No. If you'd crushed my brain, I think the organism would have digested it and that would be the end of me. But short of anything that drastic, I believe we're immortal."

"Immortal? That does rather put another face on it, doesn't it?"

The bank was becoming a little lower, and at one point, where the raw ground was thickly seeded with boulders, there was a talus slope that looked as if it could be climbed. George started up it.

"Meister," said Gumbs after a moment.

"What do you want?"

"You're right, you know—I'm getting some feeling back already. Look here, is there anything this beast can't do? I mean, for instance, do you suppose we could put ourselves back together the way we were, with all the—appendages, and so on?"

"It's possible," George said curtly. It was a thought that had been in the back of his mind, but he didn't feel like discussing it with Gumbs just now.

They were halfway up the slope.

"Well, in that case," said Gumbs meditatively, "the thing has *military* possibilities, you know. Man who brought a thing like that direct to the War Department could write his own ticket, more or less."

"After we split up," George offered, "you can do whatever you please."

"But dammit," said Gumbs in an irritated tone, "that won't do."

"Why not?"

"Because," said Gumbs, "they might find you." His hands reached up abruptly, pried out a small boulder before George could stop him.

The large boulder above it trembled, dipped and leaned ponderously outward. George, directly underneath, found that he could move neither forward nor back.

"Sorry again," he heard Gumbs saying, with what sounded like genuine regret. "But you know the Loyalty Committee. I simply can't take the chance."

THE boulder seemed to take forever to fall. George tried twice more, with all his strength, to move out of its path. Then, instinctively, he put his arms up straight under it.

It struck.

George felt his arms breaking like twigs, and saw a looming grayness that blotted out the sky;

he felt a sledge impact that made the ground shudder beneath him.

He heard a splattering sound.

And he was still alive. That astonishing fact kept him fully occupied for a long time after the boulder had clattered its way down the slope into silence. Then, at last, he looked down to his right.

The resistance of his stiffened arms, even while they broke, had been enough to lever the falling boulder over, a distance of some thirty centimeters. The right half of the monster was a flattened, shattered ruin. He could see a few flecks of pasty gray matter, melting now into green-brown translucence as the mass flowed slowly together again.

In twenty minutes, the last remnants of a superfluous spinal cord had been absorbed, the monster had collected itself back into its normal lens shape, and George's pain was diminishing. In five minutes more, his mended arms were strong enough to use.

They were also more convincingly shaped and colored than before—the tendons, the fingernails, even the wrinkles of the skin were in good order. In ordinary circumstances this discovery would have left George happily bemused for hours. Now, in his impatience, he barely noticed it. He climbed to the top of the bank.

Thirty meters away, a humped green-brown body like his own lay motionless on the dry grass.

It contained, of course, only one brain. Whose?

McCarty's, almost certainly; Vivian hadn't had a chance. But then how did it happen that there was no visible trace of McCarty's arm?

Unnerved, George walked around the creature for a closer inspection.

ON the far side, he encountered two dark-brown eyes, with an oddly unfinished appearance. They focused on him after an instant and the whole body quivered slightly, moving toward him.

Vivian's eyes had been brown; George remembered them distinctly. Brown eyes with heavy dark lashes in a tapering slender face. But did that prove anything? What color had McCarty's eyes been? He couldn't remember.

George moved closer, hoping fervently that the Something-or-other *meisterii* was at least advanced enough to conjugate, instead of trying to devour members of its own species . . .

The two bodies touched, clung and began to flow together. Watching, George saw the fissioning process reverse itself. From paired lenses, the alien flesh melted into a slipper-shape, to an

ovoid, to a lens-shape again. His brain and the other drifted closer together, the spinal cords crossing at right angles.

And it was only then that he noticed an oddity about the other brain. It seemed to be more solid and compact than his, the outline sharper.

"Vivian?" he said worriedly. "Is that you?"

No answer. He tried again; and again.

Finally:

"George! Oh dear—I want to cry, but I don't seem able to do it."

"No lachrymal glands," George said automatically. "Uh, Vivian?"

"Yes, George?" That warm voice again . . .

"What happened to Miss McCarty? How did you—"

"I don't know. She's gone, isn't she? I haven't heard her for a long time."

"Yes," said George, "she's gone. You mean you don't *know*? Tell me what you did."

"Well, I wanted to make an arm, because you told me to, but I didn't think I had time enough. So I made a skull instead. And those things to cover my spine—"

"Vertebrae." Now *why*, he thought discontentedly, *didn't I think of that?* "And then?"

"I think I'm crying now," she said. "Yes, I am. It's such a relief

—And then, after that, nothing. She was still hurting me, and I just lay still and thought how wonderful it would be if she weren't in here with me. After a while, she wasn't. And then I grew eyes to look for you."

The explanation, it seemed to George, was more perplexing than the enigma. Staring around in a vague search for enlightenment, he caught sight of something he hadn't noticed before. Two meters to his left, just visible in the grass, was a damp-looking grayish lump, with a suggestion of a stringy extension trailing off from it.

There must, he decided suddenly, be some mechanism in the Something-or-other *meisterii* for disposing of tenants who failed to adapt themselves—brains that went into catatonia, or hysteria, or suicidal frenzy. An eviction clause in the lease.

Somehow, Vivian had managed to stimulate that mechanism—to convince the organism that McCarty's brain was not only superfluous but dangerous—"Toxic" was the word.

It was the ultimate ignominy. Miss McCarty had not been digested. She'd been excreted.

BY sunset, twelve hours later, they had made a good deal of progress. They had reached an understanding very agreeable to

them both. They had hunted down another herd of the pseudo-pigs for their noon meal. They had not once quarreled or even irritated each other. And for divergent reasons—on George's side because the monster's normal metabolism was unsatisfactory when it had to move quickly, and on Vivian's because she refused to believe that any man could be attracted to her in her present condition—they had begun a serious attempt to reshape themselves.

The first trials were extraordinarily difficult, the rest surprisingly easy. Again and again, they had to let themselves collapse back into an ameboid shape, victims of some omitted or malfunctioning organ, but each failure smoothed the road. They were at last able to stand breathless but breathing, swaying but stable, face to face—two preliminary sketches of self-made Man.

They had also put thirty kilometers between themselves and the Federation camp. Standing on the crest of a rise and looking southward across the shallow valley, George could see a faint funereal glow: the mining machines, chewing out metals to

feed the fabricators that would spawn lethal spaceships.

"We'll never go back there, will we?" begged Vivian.

"No," said George confidently. "We'll let them find us. When they do, they'll be a lot more disconcerted than we will. We can make ourselves anything we want to be, remember."

"I want you to want me, so I'm going to be beautiful."

"More beautiful than any woman ever was," he agreed, "and both of us will have super-intelligence. I don't see why not. We can direct our growth in any way we choose. We'll be more than human."

"I'd like that," said Vivian.

"They won't. The McCartys and the Gumbs and all the rest would never have a chance against us. We're the future."

There was one thing more, a small matter, but important to George, because it marked his sense of accomplishment, of one phase ended and a new one begun. He had finally completed the name of his discovery.

It wasn't Something-or-other *meisterii* at all.

It was *Spes hominis*—Man's hope.

—DAMON KNIGHT

Protective Mimicry

By **ALGIS BUDRYS**

If you have to eliminate logic

to solve a problem, the answer

must be whatever is left over!

THE strip of indestructible fiber goes into a slot in one end of the machine. It passes between rollers, dips into chemical baths, is stamped, dyed, analyzed for flaws, and then run through a unit which is detached from the main body of the machine every night and locked in

a guarded vault. Finally, the strip emerges, is chopped into convenient lengths, and delivered into a bin, from which it is carefully moved into armored cars and distributed. It is known as money.

Besides being non-defaceable, fireproof, immune to wear, weather and water, it has also

Illustrated by **WILLER**

had an electronic pattern impressed into the fiber by that top-secret unit. When you spend it, it is passed over a simple plate that reads the pattern. If serial number and pattern match, nothing happens. But if what you're presenting as legal tender is homemade, so many bells go off you'd think you were in a penny arcade. The engraving, the chemical composition of the ink, and the fiber are difficult enough to duplicate, but the pattern snaps the clincher on it. Only the government's got the equipment to put that in.

All of which may serve to explain why Saxegaard yelped when I spread the fourteen identical bills on his desk.

BESIDES being the Chief Inspector, United Galactic Federations Department of the Treasury, Investigation Division, (Currency), Saxegaard is a short man with a big mouth. The kind of fellow who always waits ninety seconds between cigarettes so he won't be accused of chain smoking.

"Baumholtzer, where'd you get these?" he asked after he climbed down off the drapes.

They'd come into the New York Clearing House from a branch on Deneb XI. The manager there had blown his top and called us the minute he spotted

them. I told Saxegaard that, and he chewed at his thumb for a few minutes.

"Will he spread the word around?" he asked finally.

"I threw the fear of UnGalac into him."

"Good. At least we won't have any financial panics—for a while. Not until that manager gets himself out from financially under, anyway. You checked these through the lab?" he hopefully asked, probably hoping for a loophole.

"The ink and paper's government stock, all right, and they match government plates. Beeper plates don't even hum when they're passed over them. In fact, you could spend them anywhere, as long as you only passed one bill at a time."

"Probably wouldn't even have to be that careful. How do you know all the bills in your wallet right now don't have the same serial number?" Saxegaard asked.

I shook my head. "I checked."

Saxegaard looked at the bills a while longer, then sank back into his chair. His mouth twisted into a sad little smile.

"Baumholtzer," he said, "you know how much work this office has done up to now. It's a joke, a sinecure. Nobody, nobody can logically expect to counterfeit a bill and get away with it. It's

only because, throughout the Universe, there is a certain percentage of people who will try anything once, and a corresponding percentage of purblind idiots who will accept anything with engraving on it as currency of the realm, that this department exists at all. I have seen cigar coupons and crayon sketches come into this office. I have seen grocery store premium certificates and jet bus transfers, but only because those same microcephalic imbeciles have neglected to pass the stuff over a beeper plate.

"Do you think I've been happy in my job, Baumholtzer? I get paid a good salary, and nothing ever happens to make me sweat to earn it. I shouldn't have any worries." He sighed. "But I do, Baumholtzer, I do. For fifteen years I have sat in this office and waited for somebody to invent a matter duplicator."

I'd thought of that, too, but our part-time lab technician had mumbled something about the conservation of matter and energy. He had a hard time making it stick, though, with those fourteen bills, identical down to a whisky stain in one corner, staring him in the face.

Still, one of the first things you learn in this racket is not to go off half-cocked. Saxegaard knew that, too, because he said, "All right,

Baumholtzer, off to Deneb XI with you, and find out if anyone in that neighborhood has a matter duplicator, or if he hasn't, what he *has* got that looks so much like it."

He looked at his watch and lit another cigarette.

I LIT a cigarette and wished I hadn't. The hot fog that passes for atmosphere on Deneb XI washed out my lungs and made the smoke taste like well-decayed leaf mold. I dragged a sleeve across my face, removing the sweat from my brow and replacing it with sweat from my arm.

Deneb XI is a jungle world, with climate and insects to match. I leaned my tired and dripping body against a wall and slapped limply at a specimen of insect that could have given a Brazilian mosquito cards and spades. I cursed it with damp enthusiasm and enjoyed my view of the capital city of Deneb XI.

This jewel in the diadem of the UnGalac was a motley collection of structures that looked as if they had been deposited there by the last high tide. This capital city—whose name, take it or leave it, was Glub—was also the only city on Deneb XI, which was the one reason it had endeared itself to me.

I have my suspicions that the Denebians have yet to invent the

wheel. At any rate, practically the only way to get around the planet is on foot. Not that checking every bank and electronic-supply shop in Glub was any Sunday promenade. My feet kept reminding me of that.

The insect got in between me and the wall at this point, and stabbed me in the back. I consigned matter duplicators, blank-faced store owners, and prissy bank managers to the same gooey hell, smashed the insect against the wall, and headed for a bar.

One nice thing about Deneb—the natives are too primitive to run things, so practically all the people who do anything important in Glub are Terrestrials, or at least members of the Terrestrial Federation, in whose territory Deneb XI lies. I not only found a bartender who spoke UnGalac, but one who knew what a Tom Collins was. It was a bright spot in an otherwise abysmal day.

I carried my glass over to a table and stretched out on the chair beside it. I would have been a more or less contented man if it hadn't been for the knowledge that I'd have to be up and back to my fruitless clod-hopping in a few minutes. I had yet to discover anyone who was buying more than a normal amount of electronic parts, or who had bought same at any time in the recent past.

The banks were no better. Nobody had pushed large amounts of money across their plates recently, nobody had brought in any duplicate bills for investigation, nobody had deposited bills with identical serial numbers. If I asked a clerk how come fourteen duplicates had gotten through, the answer was that it must have been during Harry's shift, or Moe's, or Maxie's. Anybody's but theirs. I'd found seven defective beeper plates in five banks, but taking the wind out of the sails of caspetitious bank managers wasn't helping me find my man.

I took one last drag on the Tom Collins and was about to leave when I looked up and saw an interesting individual standing over my table.

HE was a Terrestrial, but he'd been on Deneb a long time, because he was wearing the flour-sack type of garment the natives have. His hair, which was potato-field gray, was parted in the middle and curled around his temples and led back behind his ears. The ears had little pieces of bone in them. His eyes were corniced with the biggest damned eyebrows I ever saw, and his ping-pong-ball nose was thrust out of a clump of whiskers. He stood about six eight and must have weighed close to one hun-

dred pounds, saturated.

I lay back and enjoyed the sight for a while. He stared right back, but I guess he got tired of playing look-me-in-the-eye, because the whiskers moved and the apparition spoke.

"Mr. Baumholtzer?" it queried in a disappointingly normal voice.

"True," I confessed.

"The same Mr. Baumholtzer who has been going around asking all those questions about duplicate UnGalac notes?"

"Probably. What's your trouble, Mr—?" I let it trail off in the time-honored fashion.

"Munger," he answered. "Dudecimus Munger."

"This bids fair to become fascinating," I said, wondering whether it would be Moe or Maxie that was going to get the blame for letting my name and assignment leak out. "Won't you pull up a chair, Mr. Munger?"

"I'm afraid I won't have time," he answered in a flustered voice. "Are you really the Mr. Baumholtzer that's working on this case for the Treasury Department?"

"Yeah, sure," I answered. "Why? You're not the fellow that's turning out these duplicates, are you?" Which stands as the leading question of the year, because Munger rummaged around in the folds of his toga

and came up with a Mistral coagulator, which he then pointed at my head.

"I am," he said.

The bartender hit the floor with a crash and I put my hands on the edge of the table. "Let's not make any rash decisions, now," I said, wondering if I could get to my own pacifier before he fused my brains solid.

Munger shook his head. "I can't very well see how I could let you live."

"Aw, come on, try," I answered, and tilted the table into the pit of his stomach at the same time I dived for the floor.

The Mistral belched and mummified a potted plant behind me. The table smashed against the floor.

Munger said "Oh, drat!" and landed with a sound like a pool cue bouncing on linoleum. I scrambled over the table and managed to raise an arm and swipe at his jaw. I missed, but I hit the Mistral, which flew across the room and broke open, immolating every bug in that vicinity, but rendering itself obsolete at the same moment.

Munger made an annoyed sound and clubbed me on the jaw. I started to pass out, and he put his hands around my neck, but right about then the bartender let out a yelp that must have attracted some attention, because

feet came running toward the bar from out in the street.

Munger repeated his expression of annoyance and smacked me another one. This time I went under.

SOMETHING wet was dabbing my face I opened my eyes, and there was the bartender with a wet rag.

"All right, where is he?" I asked.

The bartender gave me a frightened look. "He's gone. He ran out when I yelled. I came right over and started to bring you to. You haven't been unconscious for more than a minute. That's because I came right over and started to bring you to. He ran out when I yelled, you know."

"Which way did he go, Galahad?"

"I—I don't know. I didn't have time to notice after I yelled and came over to—"

"Stuff it!" I said, threw him off, and ran out the back door.

Naturally, there wasn't a trace of Munger. I tried the front, but there was a small crowd out there, and he hadn't gone that way.

I walked back to the bar, "All right, bright eyes," I said, "feed me another Collins. And don't put any little sprigs of mint in it."

"Well, you don't have to get huffy about it!" he said.

REALLY, Mr. Baumholtzer, there's no need to be excited about this unfortunate occurrence," the police inspector said. He leaned back in his chair and gazed at the end of his cigar. "This man was an obvious maniac. We'll pick him up on your complaint in a day or two, and he'll eventually wind up in a psycho ward."

I sighed. I was getting worse than nowhere. I reached into my pocket and pulled out my buzzer. I flung it on his desk.

"This badge says I'm a Treasury Agent, so don't go treating me like an ordinary taxpayer. I'm here investigating a counterfeiting case and this guy's in it up to his conspicuous ears. Now let's see some action!"

I wasn't supposed to let anyone in on my job, but the news was already all over town, so the cops might as well be enlightened, too.

The inspector's eyebrows went up. "Counterfeiting?" I could hear the wheels running around loose inside his head. "Alaric!" he yelled all of a sudden. "Alaric! Get me the Munger file!" He turned back to me with a pie-eating grin on his face. "I'm sorry, Mr. Baumholtzer, I'm afraid I was telling you something of a white lie.

"You see," he went on, "we get a number of complaints about

Munger, but he's apparently a very wealthy man. He's a trader or something at a native village in the interior, and once or twice a year he comes out and raises a little hell. He scares people sometimes and I thought this was one of those cases. But counterfeiting? Well!"

"Yeah," I said.

I had a hunch the inspector was kind of worried that some of Munger's money might have found its way to him. I wouldn't have any real trouble with the inspector, though. He could be bought, but he wouldn't stay bought. Not if any big trouble came up, anyway.

"You say he was a trader?" I asked, trying to pass time until the file came up. "How does this tie in with a matter duplicator?"

"Matter duplicator!" The inspector turned pale. "You mean those counterfeits of his are identical copies of the real thing?"

"That's the idea."

"You don't say!"

He was fighting hard not to dig into his wallet and take a thorough, nervous look.

FILL your bathtub full of mud. Build a fire under it, turn on the hot shower, and crawl in. Wallow. Do that and you've got a fair idea of the Denebian jungle.

Never mind the trees. The in-

spector and I had been plowing along for half a day and I hadn't seen a tree yet—the rain was too thick. I ran into them and I still couldn't see them, maybe because there was mud all over me every time I picked myself up. I'd stumble on until the rain washed me off, and then I'd hit another tree, and ploppo!

The inspector led the way, stopping to consult a compass and a map once in a while. He was all eagerness.

Finally, he put out a hand and stopped me. I looked up and realized there was no rain coming down on me at about the same time I saw the leaf-thatched roof.

"Rain shelter," he explained. "The natives build them. This one's not too far from Munger's village. We'll rest a while and—" The inspector's mouth hung open.

I turned around and there, in the far corner of the shelter, stood Munger and a couple of natives armed with spears.

"Coincidence, what?" Munger asked, grinning nastily. He turned to the natives and said something that I swear sounded like "Itchy scratchy," but it must have meant "Take care of 'em for me, boys," or something like that, because they moved in on us.

One of the lads had the point of his spear right in my middle or I would have tried to break

for it, but the inspector was luckier.

"I'll get help!" he yelled, and took off into the mud like a big-bottomed turtle.

The native that was supposed to handle him took off after him, but the inspector had the advantage of feet developed through years of pounding beats. The native realized almost immediately that he was up against superior talent, tried a perfunctory cast of his spear, and then came sloshing back to our little tableau.

"Well, Mr. Baumholtzer, your companion's action has saved your life, for a while," Munger said. "Now we'll have to hold you as a hostage in case help should arrive."

"Thanks," I said.

I was looking at my native's loincloth. It was composed of tastefully arranged thousand-credit notes.

"Itchy scratchy pretty damn quickie," Munger said, and this time it obviously meant "Let's get this jerk to the village, fellows," because that's what they did.

THE jungle echoed to the thunder of a huge drum. In the flickering firelight, naked figures swayed and leaped, and bare feet thudded on a log platform in the center of the village. The rhythm vibrated through the platform

until the air seemed to shudder, and the tremors shook my trussed-up body.

"*Brr-room! Boom!*"

A strident keening rose from the savage throats and distant huts sent back the echo of the primal wail. The firelight gleamed from the polished skin of Duodecim^{us} Munger, who had doffed the formal toga and assumed the simple loincloth of the jungle. He stood impassively beside me, his arms folded, staring out with brooding eyes over the people he ruled. In the fire's gleam, he was as much a savage as they, and the majesty of his bearing spoke more loudly than words that he was their king.

He inclined his head toward me and spoke.

"It's amazing, the nonsense you have to take with these people," he said. "This clambake, for instance. They're propitiating the spirit of the tree. Why? I don't know. Damn tree's never failed yet." He indicated a majestic giant of the jungle with a nod. "But no, they've got to go into this marathon every night before I do my stuff. This'll keep up to dawn and I'll be dead on my feet tomorrow, but we got to have the stinkin' dance." He shook his head in disgust. "Jesus, I wish I had a fifth handy. I've been drinking this native bilge for too long."

Then he went back into his cigar store Indian act.

He was right. We were up until the sun rose and that racket didn't knock off for an instant. I had all that time to sit there, trying to figure out where Munger was making those duplicate bills, and what was so important about that tree. Needless to say, I didn't reach any illuminating conclusions. That drum kept pounding away like crazy. If I could have gotten loose somehow, I would have grabbed my gun, which Munger now had strapped to his waist, and shot that berserk drummer before even thinking about making a break for it.

Finally the sun came up and the Denebians quit howling. Neither Munger nor I were in a mood for small talk or pleasant conversation by that time. He picked me up and put me on my feet.

"Let's go, Baumholtzer," he said. "Now you'll discover just how it's done."

"Good of you to show me," I said. "I suppose this means I'll never live to tell about it."

"That's very sensible of you. I like a man who can face facts."

WE walked across the log platform to the base of the tremendous tree in whose honor the recent brawl had been held. I still couldn't see the connection,

but I was willing to wait.

I didn't have to. Not very long, anyway. Munger reached into a pouch on his loincloth and pulled out a bill. I looked at it. It was either another of the duplicates I'd brought into Saxegaard's office, or else it was the parent bill.

"I don't use the thousand-credit note unless the natives need new loincloths," Munger explained over his shoulder. "These fifties are a lot easier to dispose of."

"The hell they are," I said. "How'd I find you?"

"That was a mistake," he answered testily. "The minute I've got enough of these made, I sell them to certain — ah — contacts of mine for fifty per cent of face value. What you caught was a sample batch one of my former contacts spent through misguided avarice."

"Less talk and more action," I said. I didn't even have to guess what had happened to his "contact" and I was impatient to see how he was going to get a tree to duplicate his money for him.

"All right," he said, pulling my gun out of his belt. "I used to have the natives make a loud noise, but this will be infinitely more efficient."

He'd folded the fifty-credit bill into a paper airplane while we'd been talking. Now he held it in his right hand, ready to launch at the tree, while he



raised my gun in his left. Behind us, the murmurs among the natives cut down into silence. The tree's big leaves rustled loudly in the silence.

Bam! The gun went off and the folded bill flew at the tree. It sailed into the foliage.

There was a popping noise.

Followed by another. And another. More. More, infinitely more, and still more, until all I could hear was pop! pop! pop!

The bill came sailing back out of the foliage. Right behind it came another one, and behind these came flight groups, squadrons, wings, armadas of paper

airplanes that were fifty-credit notes! They scattered out in all directions from the strangely moving foliage, and sailed around over the native village.

"Well, what do you know?" I said blankly, my mouth open. An airplane flew into it. I pulled the plane out and carefully unrolled it, staring at it with bulging eyes. It was as genuine as the day is long. All around me the natives were going crazy, running and jumping around, picking airplanes out of the air and off the ground, stuffing them into little bags they had ready.

Munger turned around and looked at me. "Startling, isn't it?" he asked politely.

"Protective mimicry!" I yelled, suddenly realizing.

He nodded. "Precisely. I discovered this tree six years ago. I was lost while attempting to evade the clutches of the law on a confidence rap. I swung an ax at the damn thing to blaze a trail, and I almost got scalped. Fifty axes came bouncing back at me."

"But how did anything ever develop mimicry to this extent? I've heard of animals and insects assuming the forms of dangerous life-forms as camouflage, but never to this degree."

"Search me," Munger said. "The Eglins contacted this world centuries ago, before the Terrestrials took this federation away

from them. They were great little experimenters, the Eglins."

"Hmm. It does look funny, just this ~~one~~ tree like this. Maybe it was some kind of experimental plant. It is just one tree, isn't it?" I asked hastily.

"Definitely. After I became buddies with the natives and set up this village here, I had them scour the jungle for another like it, but no go."

"Hell, one's good enough. What a setup! You scare the tree with a loud noise, and it obliges by duplicating what it thinks is the menace. Brother!"

"That's what I said when those axes came at me," Munger said. He was facing me, with fifty-credit bills settling down all around him, and now he raised

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my gun. "Well, Baumholtzer, it looks as though your pal didn't bring help, after all. I'll miss your company."

He began tightening on the trigger, and I started to sweat.

Suddenly there was an outbreak of yelling on the other side of the village. A gun went off and several spears slashed through the air.

"The cops!" Munger stood staring at the inspector and his men as they broke into the open from the edge of the jungle. "They must have sneaked up after surprising my lookouts!"

Munger raised my gun again. "I'll still get you, though!"

I charged at him, hoping he'd

miss the first shot.

He didn't fire it before I plowed into him. We rolled onto the ground and I grabbed for him, but he scrambled away. I stumbled back against the tree just as he fired and missed me.

WELL, that's about it. Here we sit in the spaceport on Deneb XI, waiting for the government to get around to sending out a ship to pick us all up.

Once Munger missed his shot, the fight was over, for obvious reasons. He didn't stand a chance against us.

Yeah, us. All one hundred and sixty-eight of me.

—ALGIS BUDRYS

FORECAST

Coming up next month is *THE OLD DIE RICH* by H. L. Gold, a grimly realistic novella based on news items that you've read repeatedly, wondered about for a short while, and then shrugged away as impossible to explain. But there is an explanation . . . one that the reporters are unable to track down . . . unless, to all the other necessary qualifications, they add willingness to commit suicide in order to get the information!

Illustrating the lead story is another *CAMERAGE* cover, the astonishing photographic montage process first displayed on the December 1952 *GALAXY*.

Look forward also to two stimulating novelets:

HORSE TRADER by Poul Anderson puts Earth in a peculiar commercial position—selling things it never had to interstellar visitors who haven't the cash or goods to buy them.

STUDENT BODY by F. L. Wallace begins with an error made by a research crew. That wouldn't be so appalling if the researching crew weren't infallible and if the mistake stopped getting more and more complex and bewildering.

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IF she's dead, I thought, I'll never find her in this white flood of moonlight on the white sea, with the surf seething in and over the pale, pale sand like a great shampoo. Almost always, suicides who stab themselves or shoot themselves in the heart carefully bare their chests; the same strange impulse generally makes the sea-suicide go naked.

A little earlier, I thought, or later, and there would be shadows for the dunes and the breathing toss of the foam. Now the only real shadow was mine, a tiny thing just under me, but black enough to feed the blackness of the shadow of a blimp.

A little earlier, I thought, and I might have seen her plodding up the silver shore, seeking a place lonely enough to die in. A little later and my legs would rebel against this shuffling trot through sand, the maddening sand that could not hold and would not help a hurrying man.

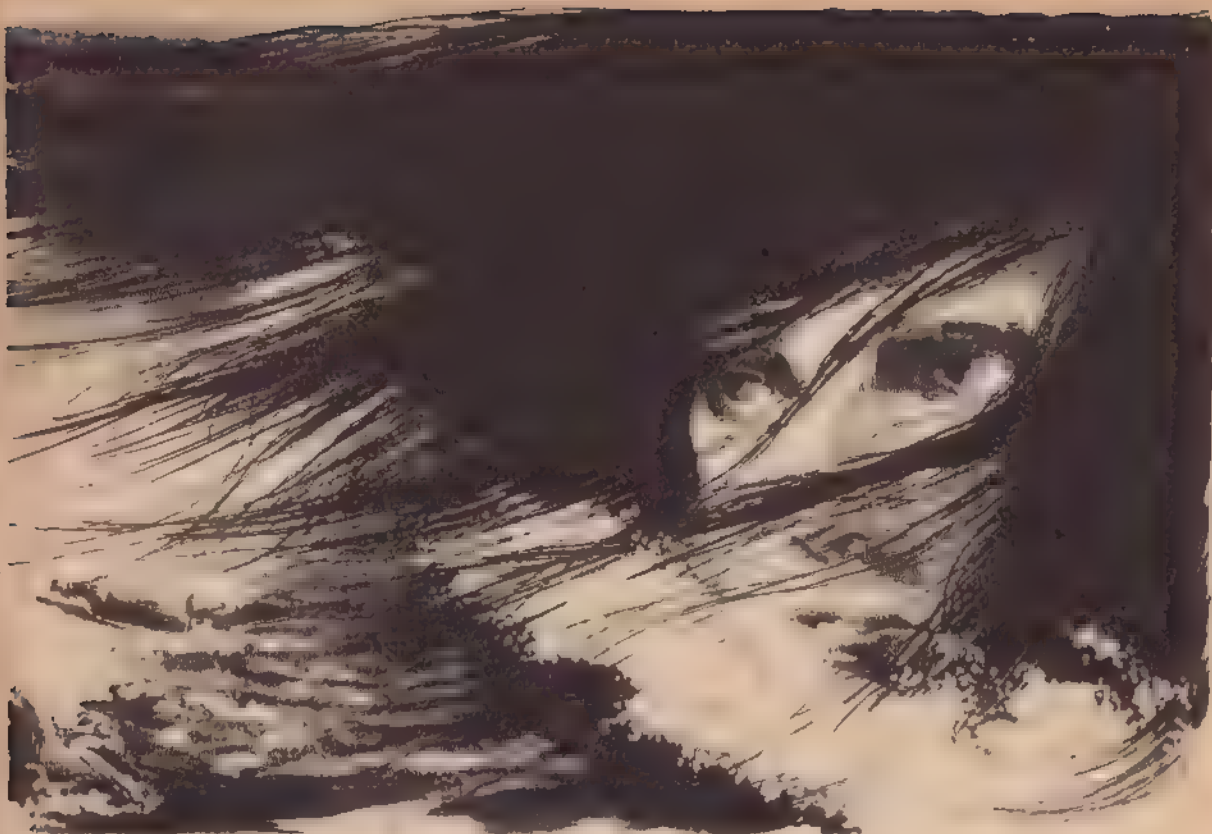
My legs did give way then and I knelt suddenly, sobbing—not for her; not yet—just for air. There was such a rush about me: wind, and tangled spray, and colors upon colors and shades of colors that were not colors at all but shifts of white and silver. If light like that were sound, it would sound like the sea on sand, and if my ears were eyes, they



SAUCER

would see such a light.

I crouched there, gasping in the swirl of it, and a flood struck me, shallow and swift, turning up and outward like flower petals where it touched my knees, then



OF LONELINESS

By THEODORE STURGEON

*There are secrets that can be
repeated endlessly and remain
wholly and absolutely secret!*

Illustrated by BEECHAM

soaking me to the waist in its bubble and crash. I pressed my knuckles to my eyes so they would open again. The sea was on my lips with the taste of tears and the whole white night shout-

ed and wept aloud.

And there she was.

HER white shoulders were a taller curve in the sloping foam. She must have sensed me

—perhaps I yelled—for she turned and saw me kneeling there. She put her fists to her temples and her face twisted, and she uttered a piercing wail of despair and fury, and then plunged seaward and sank.

I kicked off my shoes and ran into the breakers, shouting, hunting, grasping at flashes of white that turned to sea-salt and coldness in my fingers. I plunged right past her, and her body struck my side as a wave whipped my face and tumbled both of us. I gasped in solid water, opened my eyes beneath the surface and saw a greenish-white distorted moon hurtle as I spun. Then there was sucking sand under my feet again and my left hand was tangled in her hair.

The receding wave towed her away and for a moment she streamed out from my hand like steam from a whistle. In that moment I was sure she was dead, but as she settled to the sand, she fought and scrambled to her feet.

She hit my ear, wet, hard, and a huge pointed pain lanced into my head. She pulled, she lunged away from me, and all the while my hand was caught in her hair. I couldn't have freed her if I had wanted to. She spun to me with the next wave, battered and clawed at me, and we went into deeper water.

"Don't . . . don't . . . I can't swim!" I shouted, so she clawed me again.

"Leave me alone," she shrieked. "Oh, dear God, why can't you *leave*" (said her fingernails) "me . . ." (said her snapping teeth) "*alone!*" (said her small hard fist).

So by her hair I pulled her head down tight to her white shoulder; and with the edge of my free hand I hit her neck twice. She floated again, and I brought her ashore.

I carried her to where a dune was between us and the sea's broad noisy tongue, and the wind was above us somewhere. But the light was as bright. I rubbed her wrists and stroked her face and said, "It's all right," and, "There!" and some names I used to have for a dream I had long, long before I ever heard of her.

She lay still on her back with the breath hissing between her teeth, with her lips in a smile which her twisted-tight, wrinkle-sealed eyes made not a smile but a torture. She was well and conscious for many moments and still her breath hissed and her closed eyes twisted.

"Why couldn't you leave me alone?" she asked at last. She opened her eyes and looked at me. She had so much misery that there was no room for fear. She shut her eyes again and said,

"You know who I am."

"I know," I said.

She began to cry.

I WAITED, and when she stopped crying, there were shadows among the dunes. A long time.

She said, "You don't know who I am. Nobody knows who I am."

I said, "It was in all the papers."

"That!" She opened her eyes slowly and her gaze traveled over my face, my shoulders, stopped at my mouth, touched my eyes for the briefest second. She curled her lips and turned away her head. "Nobody knows who I am."

I waited for her to move or speak, and finally I said "Tell me."

"Who are you?" she asked, with her head still turned away.

"Someone who . . ."

"Well?"

"Not now," I said. "Later, maybe."

She sat up suddenly and tried to hide herself. "Where are my clothes?"

"I didn't see them."

"Oh," she said. "I remember. I put them down and kicked sand over them, just where a dune would come and smooth them over, hide them as if they never were . . . I hate sand. I

wanted to drown in the sand, but it wouldn't let me . . . You mustn't look at me!" she shouted. "I hate to have you looking at me!" She threw her head from side to side, seeking. "I can't stay here like this! What can I do? Where can I go?"

"Here," I said.

She let me help her up and then snatched her hand away, half-turned from me. "Don't touch me. Get away from me."

"Here," I said again, and walked down the dune where it curved in the moonlight, tipped back into the wind and down and became not dune but beach. "Here." I pointed behind the dune.

At last she followed me. She peered over the dune where it was chest-high, and again where it was knee-high. "Back there?"

I nodded.

"I didn't see them."

"So dark . . ." She stepped over the low dune and into the aching black of those moon-shadows. She moved away cautiously, feeling tenderly with her feet, back to where the dune was higher. She sank down into the blackness and disappeared there. I sat on the sand in the light. "Stay away from me," she spat.

I rose and stepped back. Invisible in the shadows, she breathed, "Don't go away." I waited, then saw her hand press

out of the clean-cut shadows. "There," she said, "over there. In the dark. Just be a . . . Stay away from me now . . . Be a—voice."

I did as she asked, and sat in the shadows perhaps six feet from her.

She told me about it. Not the way it was in the papers.

SHE was perhaps seventeen when it happened. She was in Central Park, in New York. It was too warm for such an early spring day, and the hammered brown slopes had a dusting of green of precisely the consistency of that morning's hoar frost on the rocks. But the frost was gone and the grass was brave and tempted some hundreds of pairs of feet from the asphalt and concrete to tread on it.

Hers were among them. The sprouting soil was a surprise to her feet, as the air was to her lungs. Her feet ceased to be shoes as she walked, her body was consciously more than clothes. It was the only kind of day which in itself can make a city-bred person raise his eyes. She did.

For a moment she felt separated from the life she lived, in which there was no fragrance, no silence, in which nothing ever quite fit nor was quite filled. In that moment the ordered disapproval of the buildings around

the pallid park could not reach her; for two, three clean breaths it no longer mattered that the whole wide world really belonged to images projected on a screen; to gently groomed goddesses in these steel and glass towers; that it belonged, in short, always, always to someone else.

So she raised her eyes, and there above her was the saucer.

It was beautiful. It was golden, with a dusty finish like that of an unripe concord grape. It made a faint sound, a chord composed of two tones and a blunted hiss like the wind in tall wheat. It was darting about like a swallow, soaring and dropping. It circled and dropped and hovered like a fish, shimmering. It was like all these living things, but with that beauty it had all the loveliness of things turned and burnished, measured, machined, and metrical.

At first she felt no astonishment, for this was so different from anything she had ever seen before that it had to be a trick of the eye, a false evaluation of size and speed and distance that in a moment would resolve itself into a sun-flash on an airplane or the lingering glare of a welding arc.

She looked away from it and abruptly realized that many other people saw it—saw *something*—too. People all around her

had stopped moving and speaking and were craning upward. Around her was a globe of silent astonishment, and outside it she was aware of the life-noise of the city, the hard-breathing giant who never inhales.

She looked up again, and at last began to realize how large and how far away the saucer was. No: rather, how small and how very near it was. It was just the size of the largest circle she might make with her two hands, and it floated not quite eighteen inches over her head.

FEAR came then. She drew back and raised a forearm, but the saucer simply hung there. She bent far sideways, twisted away, leaped forward, looked back and upward to see if she had escaped it. At first she couldn't see it; then as she looked up and up, there it was, close and gleaming, quivering and crooning, right over her head.

She bit her tongue.

From the corner of her eye, she saw a man cross himself. *He did that because he saw me standing here with a halo over my head*, she thought. And that was the greatest single thing that had ever happened to her. No one had ever looked at her and made a respectful gesture before, not once, not ever. Through terror, through panic and wonder-

ment, the comfort of that thought nestled into her, to wait to be taken out and looked at again in lonely times.

The terror was uppermost now, however. She backed away, staring upward, stepping a ludicrous cakewalk. She should have collided with people. There were plenty of people there, gaping and craning, but she reached none. She spun around and discovered to her horror that she was the center of a pointing, pressing crowd. Its mosaic of eyes all bulged and its inner circle braced its many legs to press back and away from her.

The saucer's gentle note deepened. It tilted, dropped an inch or so. Someone screamed, and the crowd broke away from her in all directions, milled about, and settled again in a new dynamic balance, a much larger ring, as more and more people raced to thicken it against the efforts of the inner circle to escape.

The saucer hummed and tilted, tilted . . .

She opened her mouth to scream, fell to her knees, and the saucer struck.

It dropped against her forehead and clung there. It seemed almost to lift her. She came erect on her knees, made one effort to raise her hands against it, and then her arms stiffened down and

back, her hands not reaching the ground. For perhaps a second and a half the saucer held her rigid, and then it passed a single ecstatic quiver to her body and dropped it. She plumped to the ground, the backs of her thighs heavy and painful on her heels and ankles.

The saucer dropped beside her, rolled once in a small circle, once just around its edge, and lay still. It lay still and dull and metallic, different and dead.

HAZILY, she lay and gazed at the gray-shrouded blue of the good spring sky, and hazily she heard whistles.

And some tardy screams.

And a great stupid voice bel-
lowing "Give her air!" which
made everyone press closer.

Then there wasn't so much sky because of the blue-clad bulk with its metal buttons and its leatherette notebook. "Okay, okay, what's happened here stand back figods sake."

And the widening ripples of observation, interpretation and comment: "It knocked her down." "Some guy knocked her down." "He knocked her down." "Some guy knocked her down and—" "Right in broad daylight this guy . . ." "The park's gettin' to be . . ." onward and outward, the adulteration of fact until it was lost altogether because ex-

citement is so much more important.

Somebody with harder a shoulder than the rest bulling close, a notebook here, too, a witnessing eye over it, ready to change ". . . a beautiful brunet . . ." to "an attractive brunet" for the afternoon editions, because "attractive" is as dowdy as any woman is allowed to get if she is a victim in the news.

The glittering shield and the florid face bending close: "You hurt bad, sister?" And the echoes, back and back through the crowd, "Hurt bad, hurt bad, badly injured, he beat the hell out of her, broad daylight . . ."

And still another man, slim and purposeful, tan gabardine, cleft chin and beard-shadow: "Flyin' saucer, hm? Okay, Officer, I'll take over here."

"And who the hell might you be, takin' over?"

The flash of a brown leather wallet, a face so close behind that its chin was pressed into the gabardine shoulder. The face said, awed: "F.B.I." and that rippled outward, too. The policeman nodded—the entire policeman nodded in one single bobbing genuflection.

"Get some help and clear this area," said the gabardine.

"Yes, sir!" said the policeman.

"F. B. I., F. B. I.," the crowd murmured and there was more

sky to look at above her.

She sat up and there was a glory in her face. "The saucer talked to me," she sang.

"You shut up," said the gabardine. "You'll have lots of chance to talk later."

"Yeah, sister," said the policeman. "My God, this mob could be full of Communists."

"You shut up, too," said the gabardine.

Someone in the crowd told someone else a Communist beat up this girl, while someone else was saying she got beat up because she was a Communist.

SHE started to rise, but solicitous hands forced her down again. There were thirty police there by that time.

"I can walk," she said.

"Now you just take it easy," they told her.

They put a stretcher down beside her and lifted her onto it and covered her with a big blanket.

"I can walk," she said as they carried her through the crowd.

A woman went white and turned away moaning, "Oh, my God, how awful!"

A small man with round eyes stared and stared at her and licked and licked his lips.

The ambulance. They slid her in. The gabardine was already there.

A white-coated man with very clean hands: "How did it happen, miss?"

"No questions," said the gabardine. "Security."

The hospital.

She said, "I got to get back to work."

"Take your clothes off," they told her.

She had a bedroom to herself then for the first time in her life. Whenever the door opened, she could see a policeman outside. It opened very often to admit the kind of civilians who were very polite to military people, and the kind of military people who were even more polite to certain civilians. She did not know what they all did nor what they wanted. Every single day they asked her four million five hundred thousand questions. Apparently they never talked to each other because each of them asked her the same questions over and over.

"What is your name?"

"How old are you?"

"What year were you born?"

"What is your name?"

Sometimes they would push her down strange paths with their questions.

"Now your uncle. Married a woman from Middle Europe, did he? Where in Middle Europe?"

"What clubs or fraternal organizations did you belong to?"

Ah! Now about that Rinkeydinks gang on 63rd Street. Who was *really* behind it?"

But over and over again, "What did you mean when you said the saucer talked to you?"

And she would say, "It talked to me."

And they would say, "And it said—"

And she would shake her head.

There would be a lot of shouting ones, and then a lot of kind ones. No one had ever been so kind to her before, but she soon learned that no one was being kind to *her*. They were just getting her to relax, to think of other things, so they could suddenly shoot that question at her: "What do you mean it talked to you?"

PRETTY soon it was just like Mom's or school or any place, and she used to sit with her mouth closed and let them yell. Once they sat her on a hard chair for hours and hours with a light in her eyes and let her get thirsty. Home, there was a transom over the bedroom door and Mom used to leave the kitchen light glaring through it all night, every night, so she wouldn't get the horrors. So the light didn't bother her at all.

They took her out of the hospital and put her in jail. Some ways it was good. The food. The

bed was all right, too. Through the window she could see lots of women exercising in the yard. It was explained to her that they all had much harder beds.

"You are a very important young lady, you know."

That was nice at first, but as usual it turned out they didn't mean her at all. They kept working on her. Once they brought the saucer in to her. It was inside a big wooden crate with a padlock, and a steel box inside that with a Yale lock. It only weighed a couple of pounds, the saucer, but by the time they got it packed, it took two men to carry it and four men with guns to watch them.

They made her act out the whole thing just the way it happened, with some soldiers holding the saucer over her head. It wasn't the same. They'd cut a lot of chips and pieces out of the saucer and, besides, it was that dead gray color. They asked her if she knew anything about that and for once she told them.

"It's empty now," she said.

The only one she would ever talk to was a little man with a fat belly who said to her the first time he was alone with her, "Listen, I think the way they've been treating you stinks. Now get this: I have a job to do. My job is to find out *why* you won't tell what the saucer said. I don't

want to know what it said and I'll never ask you. I don't even want you to tell me. Let's just find out why you're keeping it a secret."

Finding out why turned out to be hours of just talking about having pneumonia and the flower pot she made in second grade that Mom threw down the fire escape and getting left back in school and the dream about holding a wine glass in both hands and peeping over it at some man.

And one day she told him why she wouldn't say about the saucer, just the way it came to her: "Because it was talking to me, and it's just nobody else's business."

She even told him about the man crossing himself that day. It was the only other thing she had of her own.

He was nice. He was the one who warned her about the trial. "I have no business saying this, but they're going to give you the full dress treatment. Judge and jury and all. You just say what you want to say, no less and no more, hear? And don't let 'em get your goat. You have a right to own something."

He got up and swore and left.

FIRST a man came and talked to her for a long time about how maybe this Earth would be attacked from outer space by

beings much stronger and cleverer than we are, and maybe she had the key to a defense. So she owed it to the whole world. And then even if the Earth wasn't attacked, just think of what an advantage she might give this country over its enemies. Then he shook his finger in her face and said that what she was doing amounted to working for the enemies of her country. And he turned out to be the man that was defending her at the trial.

The jury found her guilty of contempt of court and the judge recited a long list of penalties he could give her. He gave her one of them and suspended it. They put her back in jail for a few more days, and one fine day they turned her loose.

That was wonderful at first. She got a job in a restaurant and a furnished room. She had been in the papers so much that Mom didn't want her back home. Mom was drunk most of the time and sometimes used to tear up the whole neighborhood, but all the same she had very special ideas about being respectable, and being in the papers all the time for spying was not her idea of being decent. So she put her maiden name on the mailbox downstairs and told her daughter not to live there any more.

At the restaurant she met a man who asked her for a date.

The first time. She spent every cent she had on a red handbag to go with her red shoes. They weren't the same shade, but anyway they were both red. They went to the movies and afterward he didn't try to kiss her or anything, he just tried to find out what the flying saucer told her. She didn't say anything. She went home and cried all night.

Then some men sat in a booth talking and they shut up and glared at her every time she came past. They spoke to the boss, and he came and told her that they were electronics engineers working for the government and they were afraid to talk shop while she was around—wasn't she some sort of spy or something? So she got fired.

Once she saw her name on a juke box. She put in a nickel and punched that number, and the record was all about "the flyin' saucer came down one day, and taught her a brand new way to play, and what it was I will not say, but she took me out of this world." And while she was listening to it, someone in the juke-joint recognized her and called her by name. Four of them followed her home and she had to block the door shut.

SOMETIMES she'd be all right for months on end, and then someone would ask for a

date. Three times out of five, she and the date were followed. Once the man she was with arrested the man who was tailing them. Twice the man who was tailing them arrested the man she was with. Five times out of five, the date would try to find out about the saucer. Sometimes she would go out with someone and pretend that it was a real date, but she wasn't very good at it.

So she moved to the shore and got a job cleaning at night in offices and stores. There weren't many to clean, but that just meant there weren't many people to remember her face from the papers. Like clockwork, every eighteen months, some feature writer would drag it all out again in a magazine or a Sunday supplement; and every time anyone saw a headlight on a mountain or a light on a weather balloon it had to be a flying saucer, and there had to be some tired quip about the saucer wanting to tell secrets. Then for two or three weeks she'd stay off the streets in the daytime.

Once she thought she had it whipped. People didn't want her, so she began reading. The novels were all right for a while until she found out that most of them were like the movies—all about the pretty ones who really own the world. So she learned things—animals, trees. A lousy

little chipmunk caught in a wire fence bit her. The animals didn't want her. The trees didn't care.

Then she hit on the idea of the bottles. She got all the bottles she could and wrote on papers which she corked into the bottles. She'd tramp miles up and down the beaches and throw the bottles out as far as she could. She knew that if the right person found one, it would give that person the only thing in the world that would help. Those bottles kept her going for three solid years. Everyone's got to have a secret little something he does.

And at last the time came when it was no use any more. You can go on trying to help someone who *maybe* exists; but soon you can't pretend there is such a person any more. And that's it. The end.

"**A**RE you cold?" I asked when she was through telling me.

The surf was quieter and the shadows longer.

"No," she answered from the shadows. Suddenly she said, "Did you think I was mad at you because you saw me without my clothes?"

"Why shouldn't you be?"

"You know, I don't care? I wouldn't have wanted . . . wanted you to see me even in a ball gown or overalls. You can't cover up my carcass. It shows; it's there

whatever. I just didn't want you to see me. At all."

"Me, or anyone?"

She hesitated. "You."

I got up and stretched and walked a little, thinking. "Didn't the F.B.I. try to stop you throwing those bottles?"

"Oh, sure. They spent I don't know how much taxpayers' money gathering 'em up. They still make a spot check every once in a while. They're getting tired of it, though. All the writing in the bottles is the same." She laughed. I didn't know she could.

"What's funny?"

"All of 'em — judges, jailers, juke-boxes — people. Do you know it wouldn't have saved me a minute's trouble if I'd told 'em the whole thing at the very beginning?"

"No?"

"No. They wouldn't have believed me. What they wanted was a new weapon: Super-science from a super-race, to slap hell out of the super-race if they ever got a chance, or out of our own if they don't. All those brains," she breathed, with more wonder than scorn, "all that brass. They think 'super-race' and it comes out 'super-science.' Don't they ever imagine a super-race has super-feelings, too—super-laughter, maybe, or super-hunger?" She paused. "Isn't it time you asked me what the saucer said?"

"I'll tell you," I blurted.

*"There is in certain living souls
A quality of loneliness unspeak-
able,
So great it must be shared
As company is shared by lesser
beings.
Such a loneliness is mine; so know
by this
That in immensity
There is one lonelier than you."*

"Dear Jesus," she said devoutly, and began to weep. "And how is it addressed?"

"To the loneliest one . . ."

"How did you know?" she whispered.

"It's what you put in the bottles, isn't it?"

"Yes," she said. "Whenever it gets to be too much, that no one cares, that no one ever did . . . you throw a bottle into the sea, and out goes a part of your own loneliness. You sit and think of someone somewhere finding it . . . learning for the first time that the worst there is can be understood."

The moon was setting and the surf was hushed. We looked up and out to the stars. She said, "We don't know what loneliness is like. People thought the saucer was a saucer, but it wasn't. It was a bottle with a message inside. It had a bigger ocean to cross—all of space—and not much chance of finding anybody. Loneliness? We don't know loneliness."

When I could, I asked her why

she had tried to kill herself.

"I've had it good," she said, "with what the saucer told me. I wanted to . . . pay back. I was bad enough to be helped; I had to know I was good enough to help. No one wants me? Fine. But don't tell me no one, anywhere, wants my help. I can't stand that."

I took a deep breath. "I found one of your bottles two years ago. I've been looking for you ever since. Tide charts, current tables, maps and . . . wandering. I heard some talk about you and the bottles hereabouts. Someone told me you'd quit doing it, you'd taken to wandering the dunes at night. I knew why. I ran all the way."

I needed another breath now. "I got a club foot. I think right, but the words don't come out of my mouth the way they're inside my head. I have this nose. I never had a woman. Nobody ever wanted to hire me to work where they'd have to look at me. You're beautiful," I said. "You're beautiful."

She said nothing, but it was as if a light came from her, more light and far less shadow than ever the practiced moon could cast. Among the many things it meant was that even to loneliness there is an end, for those who are lonely enough, long enough.

—THEODORE STURGEON

For Your Information

By WILLY LEY

The Ice Age (III)

A FEW issues back, I quoted the French astronomer Gérard de Vaucouleurs as having said that the surface of Mars can be likened to a terrestrial desert, moved to the Arctic and lifted to stratospheric

heights. I should have added that Monsieur de Vaucouleurs introduced one unnecessary move. Lifting the desert to stratospheric heights would be enough; that would not only thin the air over the desert, it would also cool it.



This thought is the basis of a little known theory of the origin of the Ice Ages, offered by the Austrian geologist Prof. Doctor Franz Xaver Schaffer. It has been mentioned earlier that Schaffer's compatriot, Prof. Melchior Neumayr, had shown that a comparatively slight drop in the average temperature, some 6 to 8 degrees Fahrenheit, would account for all the observed phenomena, provided only that it lasted long enough. Schaffer, about 40 years later, brought in the additional fact that the average temperature of, say, Vienna, is 6 to 8 degrees lower 2000 feet above that city.

So far, this sounds like a wonderfully simple idea. If one could prove that, at the time of the glaciations, the land masses of at least the northern hemisphere had been 2000 feet higher than now, the whole difficult problem would resolve itself neatly and easily.

That figure of 2000 feet must not be misunderstood; it does not have to mean 2000 feet higher above sea level, for the sea level may have been different itself in the past.

Probably the best way of phrasing it is to say that the land level of the northern hemisphere is supposed to have been under an average air pressure of about 700 millimeters, instead of the 760

millimeters which is the present norm.

Unfortunately, Prof. Schaffer could not show any evidence tending to prove such a higher elevation. In fact, he has to torture existing evidence to a good extent by declaring, for example, that this or that glaciation described in the textbooks was not a "true" glaciation at all, but that these geological traces upon which the textbook statement rests "happen to be misleading." In short, the neat idea did not work out.

But the fundamental assumption—namely, that the cause of the ice ages has to be sought in the atmosphere instead of somewhere in space—is rather logical. It was upon this assumption that the noted Swedish scientist Svante Arrhenius began building a famous theory half a century ago.

AS for Svante Arrhenius himself: even those who do not confuse him with a Swedish botanist of the same name usually consider him an astronomer or an astrophysicist. Although much of the work done by him in his later life belonged in the realm of cosmology and encroached heavily upon astrophysics, he was originally a chemist.

Being a chemist, he was struck by the thought that the underlying cause for climatic changes

might be changes in the chemical composition of the atmosphere.

The present norm, expressed without fractions, is 21 per cent oxygen, 78 per cent nitrogen, 1 per cent argon and "traces." And, of course, a varying amount of water vapor. The radiation of the Sun, the textbooks say, is absorbed by the ground and by the atmosphere. If the ground is covered with snow and ice, it will absorb less radiation, and as regards the atmosphere — wait a minute: just which part of the atmosphere does absorb infrared, or heat? It turned out to be one of the "traces," carbon dioxide (CO_2), which constitutes only 0.03 per cent of the atmosphere near the ground. One other gas which is also especially active in retaining heat is water vapor.

Arrhenius made a little calculation. *Supposing that there were no carbon dioxide in the air at all, what would that do to the climate?*

The result was devastating, even though it was merely a figure on paper. *The average would drop by about 30 degrees Fahrenheit!*

Furthermore, since a drop of 30 degrees F. would freeze all the water vapor out of the atmosphere, there would be an additional drop due to the absence of water vapor. This would be an

estimated 20 degrees—about 50 degrees altogether. It would spell Antarctica for both temperate zones and quite a lot of grief even for the tropics.

The next step in the reasoning ran as follows: if the climatic variations correspond to fluctuations in the carbon dioxide (and along with it the water vapor) content of the atmosphere, what could be the reason for such fluctuation? How does the carbon dioxide originate?

The layman is apt to think of gigantic forest fires, presumably caused by lightning. It is true that such fires do contribute, but it isn't so much a question of quantity, since the total in the atmosphere is quite small, but rather of steadiness of supply. Most forests don't burn down. (Actually, industrial activity and households contribute more than natural fires, just because they are steady producers).

The main suppliers of carbon dioxide are the volcanoes and other phenomena associated with them.

The main consumers are the oceans. According to Arrhenius, they absorb slightly more than 80 per cent of the gas. Next biggest consumer is erosion which, like plant life, ties the carbon dioxide chemically. In the seas, much of it is also tied up by organisms other than plants, but

they can get only at the carbon dioxide in the water.

PERIODS of volcanic activity with much carbon dioxide in the air—say, $\frac{1}{2}$ of one per cent—would be periods of warmth and of luxurious plant life. But, Arrhenius pointed out, each such period contains the beginnings of its own end. Volcanic activity is somehow connected with mountain building—we don't have to go into the question of whether it causes, is accompanied by, or is the result of mountain building—and these mountains erode while still rising. The plants thrive in the high carbon dioxide content, gulping what they can. The multitudes of sea things do the same, depleting the waters of carbon dioxide so that the ocean will absorb more.

As the Department of Economics would say: with everything geared to high consumption, a slackening of production means depletion of the reserves. In less forbidding language: as soon as the volcanoes calm down, the carbon dioxide content of the atmosphere also goes down, and so does the average temperature.

After Arrhenius had stated his general concept, a professional geologist, Dr. Fritz Frech of Breslau, tried to fit this scheme to the actual geologic past. He claimed that two full cycles could

actually be found geologically:

There was this very early Cambrian glaciation near the beginning of the Earth's geological history which we know reasonably well. During the following two geological periods, the Silurian and Devonian, volcanic activity was heavy and the climate apparently grew uniformly warm, for corals from that time have been found in high latitudes. The plants conquered the land and, during the Carboniferous Period which followed the Devonian, they appear in incredible masses. Our coal deposits formed then—all this coal was at one time carbon dioxide which the plants took out of the atmosphere.

Around the middle of that long Carboniferous Period, enormous mountain ranges formed in all continents, many of them eroding fast. Apparently there was little, if any, new volcanic supply for a while and the result was the Permian glaciation.

This, according to Frech, was the first complete cycle. The second began during the middle of the Permian Period, when there were enormous volcanic eruptions in the northern hemisphere. More of the same, especially in North America, occurred during the next period, the Triassic, and the Jurassic which followed after the Triassic. Warm climate, appar-

ently without climatic zones. Corals in the seas above Scotland, marine reptiles as far North as Spitsbergen, palms and cycads near Baltimore. Dinosaurs.

Near the end of the Cretaceous Period which followed the Jurassic, it looked as if there were hints of climatic zones. But before things slipped too badly—possibly because there were no recent mountain chains to erode in addition to the older ones—there were enormous basaltic eruptions in India.

AT any event, the Tertiary Period which followed the Cretaceous began in full tropical splendor with swamp cypresses as far North as Ellesmere Island. Apparently it grew a bit cooler during the Oligocene, the second subdivision of the Tertiary Period, but again a series of gigantic basaltic eruptions intervened. The following subdivision, the Miocene, was warm again; the lignite beds formed. Soon the great mountain chains of today began to grow—the Andes, the Himalayas, the Alps. Volcanism diminished during the last Tertiary subdivision, the Pliocene, and then seems to have stopped almost completely. The Ice Age came in. The volcanic cones we have now, including those which are dead, all formed later.

And that is how Arrhenius and

Frech explained the past. It is hardly necessary to state that there is no beautiful and unanimous agreement with them.

Some have pointed at big eruptions of historical times, like the Krakatoa catastrophe, which, by throwing millions of tons of dust into the atmosphere, caused cool summers and cold and wet winters. But it is only a special type of eruption which will do that, and a rare type at that.

Others have found evidence for volcanic activity just at times where Frech said there was none. To which Frech's pupils replied, in essence, that even during a depression there are a few people who have money, but that these exceptions do not make prosperity.

Still others have said that they admit that with 0.001 per cent carbon dioxide in the air, it would be colder, but that a surplus over what we have now won't make it warmer.

Arrhenius stuck to his guns, or rather his calculations.

We don't know the answer yet. But in time, we will.

THE FOURTH DIMENSION

THERE was an exchange of inter office memos recently, beginning at my end. Mine read: "Horace, please stop printing stories about the fourth dimension

like 'Star, Bright' because they cause too many letters." The reply: "Willy, are you really serious about this?" My answer: "Well, no, but I *did* get more letters about four-dimensional problems that month than about any other topic."

These letters ranged from such one-sentence requests as "Please explain the Fourth Dimension" to communications of several pages and single-spaced which amounted to dissertations. If one conclusion could be drawn from all this, it is that the problem of the fourth dimension still excites lots of people. Another conclusion is that we seem to be dealing with a new generation of readers, for the older science fiction fans have been through this two decades ago.

Now let's look at the fourth dimension first from the point of view of elementary mathematics. Reasoning here begins literally with a *point* which has no dimension at all. Move the point and you get a *line* from A to B, A being where the movement began and B where it stopped.

This line has one dimension: *length*.

Now move the line at a right angle to the movement of the original point and you get a *plane*. If the movement was, as specified, at right angles and for the same distance as the length

of the line, the figure will be a *square*.

Now lift the square from the paper and move it vertically, again for the same distance, and you get a *cube*.

So far, you had a visible, logical progression from dimensionless *point* to one-dimensional *line*, from there to the two-dimensional *plane*, and from that to the three-dimensional *solid*.

But when you move the *solid* through space, all you get is *another* solid of a different *shape*. Offhand, this seems to indicate that the number of dimensions stops with the third, but many people will feel like the philosopher Gustav Theodor Fechner who asked why Nature should be unable to count beyond three.

If you ask for a little more information of what the fourth dimension should be, the mathematician is apt to hold up a box of any kind, point at one of its corners and say:

"The corner of the box demonstrates the three dimensions of space—namely, length, width and height. As one can clearly see, these three dimensions are vertical to each other. The fourth dimension should be a line which is vertical to the other three—and don't think that the simple prolongation of any of the other three lines beyond the corner is the answer to the problem.

"You can't visualize such a fourth line? Of course not, because that would be the fourth dimension and our world is three-dimensional. Hence it is impossible to visualize the fourth dimension, but we can treat it mathematically. Since we call the line a , the square is a^2 and the cube a^3 * and nothing prevents and nothing prevents us from writing a^4 and from giving a name to the four-dimensional super-solid thus described."

Obviously, nothing prevents us from doing that, but neither the symbol a^4 nor the name tesseract proves or even indicates that there is something in reality which corresponds to this concept.

WELL, is there something else which indicates the reality of the fourth dimension? Let's begin at the beginning again.

Take a piece of ordinary writing paper (not a square) and cut it diagonally. You'll get two triangles, visibly congruent since their sides and their angles correspond. Place them on your table, both with the right angle to the left. You can make them

cover simply by moving them along the plane of the table top. But place them in such a way now that one has the right angle at the left and the other at the right. They can be made to cover only by turning one of them through the third dimension.

To a two-dimensional being, this would be an impossible move and it was, quite some time ago, the theme of a book called *Flatland* by A. Square. *Flatland* has been quoted in early science fiction stories about as often as the name of Albert Einstein was thrown around.

Now there are a number of three-dimensional bodies which seemed to be analogous to the two planes that would not match. It was Immanuel Kant who was the first to point out that our two hands are examples of such bodies. Your right glove will not fit your left hand, and your left shoe will not fit the right foot, even though they seem to be geometrically alike, having the same measurements in all three dimensions. But maybe they could be made to "cover" by "turning" them through the fourth dimension!

Can they? I don't know—I can't even visualize it, naturally—I'm only a three-dimensional solid myself.

Let's return to the two triangles where things are somewhat simp-

*Answer to seven correspondents: yes, I do know that a cube has 8 vertices. My statement in reply to a letter that it has 4 is not due to ignorance nor has it, as two correspondents suspected, a "hidden and higher meaning." It was a simple typographical error.

ler. Since the lengths of all three sides correspond, and since all three angles are the same, they should be as congruent as anyone could wish. Our simple experiment proved, however, that they may or may not be congruent.

What is wrong now? Simply this: a description in terms of sides and angles is an incomplete description. To make it complete, a description of arrangement has to be added.

If you keep in mind that such an additional term should be included, you can see clearly that the two triangles, when positioned in such a way that they fail to match, simply are *not* congruent. And the same goes for asymmetrical solid bodies, such as crystals. They may agree in all angles and dimensions, but if you have (and here the language has supplied a very significant term) one right-hand crystal and one left-hand crystal, they can't match. To insist that they should merely means to insist on an incomplete description.

However, the fourth dimension has one more twist. A solid, in order to exist, has to have length, width, height . . . and duration. If it had no duration, it wouldn't exist. Hence there is a fourth dimension, but we have always used another name for it. We have called it time. Time, there-

fore, should be considered the fourth dimension.

But you don't have to consider it that way at all.

MORE ABOUT PLUTO

THE existence of a planet outside the orbit of Neptune was, as is rather well known, suspected since about 1900. The planet, Pluto, was finally found in 1930 by Clyde Tombaugh, and it has been under what surveillance could be managed ever since.

But we now know that Pluto could have been discovered in 1919, for it was photographed twice during that year. The explanation is not, however, that astronomers overlooked it on these two plates. The fact is that they could not help but overlook it; two occurrences effectively hid the still unknown planet.

On one of the two plates, the tiny image of the planet was neatly bisected by a hairline flaw in the plate. Such hairline flaws are rare, but when they do occur, astronomers recognize them at a glance. Naturally, the pinpoint of light, sitting so precisely on a hairline flaw, was taken to be a part of the flaw.

On the other plate, the planet happened to be in line of sight with a small distant star. It was not precisely the line of sight, else it could not have been found

later, but almost so. The result was that a star image, known to belong in that spot, was finally elongated, though so faintly that it was not conspicuous.

And that's why Pluto was not discovered until eleven years after it was photographed.

—WILLY LEY

ANY QUESTIONS?

What is the reason for all the planets being near the plane of the ecliptic? Why aren't some of them revolving around Sol vertically in comparison with the others?

Pat Scholz

9909 Fourth Avenue
Brooklyn 9, N. Y.

The reason why our solar system — and presumably all other solar systems, too—is so flat lies in the period before the formation of the planets.

Let's assume that the Solar System began with a roughly spherical cloud of gas atoms and dust particles which surrounded the Sun. We can also assume that this cloud rotated around the sun.

Now the particles, molecules and atoms which moved in and near the equatorial plane of that cloud did not interfere with each other very much. But those which originally moved in other directions, crossing the

equator from "above" and "below," ran into each other and into "equatorial particles" in time. If their movement was stopped completely by the collision, they simply fell into the Sun. Or, if their movement was not stopped completely they "fell in" with the equatorial motion. In either case, the number of particles moving at large angles to the "equator" was diminished.

That took place before the planets themselves formed and continued while they were forming and even afterward. A few of the nonconformist particles may still be around, but not enough to see.

If the gravitational pull of the Moon is responsible for the tides here on Earth, how would the tides be affected by two or more moons? How about a planet which has rings like Saturn, but no moon or moons?

Jean De Grazia

597 Hopkins St.

Sewickly, Penna.

Let's first get a clear mental picture of what the tides are. Seen from space, they are a slight double mountain of water, one directly under the Moon, the other on the opposite side, both of which move around the Earth, inundating those portions of the shore-

lines which are shallow enough to be inundated.

In the case of a planet without a moon, but with a ring or rings, there would be a slight equatorial bulge all around which does not move. A rotating planet has such an equatorial bulge, anyway, because of its rotation, and the ring would slightly reenforce that bulge. Since this would be stationary, the planet would appear to have no tides.

In the case of a planet with several large moons, the tidal picture would be enormously complicated. Each moon would produce its double bulge and, since the various moons would revolve around the planet with various periods of revolution, so would the bulges. The high tide caused by moon A might increase the high tide of moon B, or else the low tide of moon A might cancel the high tide of moon B.

If you had a fairly watery planet with four large moons, its inhabitants would develop astronomy to a high degree early in their history.

Could you please explain the ether theory as applied to sound transmission? And what is the accepted figure for the speed of

electromagnetic waves?

E. A. Lackenbach

53 Pine Avenue

New Rochelle, N. Y.

Sound waves are transmitted through the air, not through the (hypothetical) ether. As the air thins out with altitude, there comes a point where it ceases to be a continuous medium, and even though there are still molecules of oxygen, nitrogen and other gases around, sound is no longer transmitted. At present, this is thought to take place at about 40 miles above the Earth, but it may be much lower.

The speed of sound depends only on the temperature of the air, not its density. At normal temperatures, it is about 760 miles per hour. Physics textbooks need revision to bring them up to date on this point; they state that the speed is 660 miles an hour at 25,000 feet, and ascribe it to density. In reality, the figures apply to the prevailing temperatures at those altitudes and not to the atmospheric densities.

Electromagnetic waves of any wave length do not depend on air for transmission, and so they all travel at the same rate, which is roughly 186,000 miles per second, the speed of light.

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WATCHBIRD

By ROBERT SHECKLEY





Strange how often the Millenium has been at hand. The idea is peace on Earth, see, and the way to do it is by figuring out angles.

Illustrated by EMSH

WHEN Gelsen entered, he saw that the rest of the watchbird manufacturers were already present. There were six of them, not counting himself, and the room was blue with expensive cigar smoke.

"Hi, Charlie," one of them called as he came in.

The rest broke off conversation long enough to wave a casual greeting at him. As a watchbird manufacturer, he was a member manufacturer of salvation, he reminded himself wryly. Very exclusive. You must have a

certified government contract if you want to save the human race.

"The government representative isn't here yet," one of the men told him. "He's due any minute."

"We're getting the green light," another said.

"Fine." Gelsen found a chair near the door and looked around the room. It was like a convention, or a Boy Scout rally. The six men made up for their lack of numbers by sheer volume. The president of Southern Consolidated was talking at the top of his

lungs about watchbird's enormous durability. The two presidents he was talking at were grinning, nodding, one trying to interrupt with the results of a test he had run on watchbird's resourcefulness, the other talking about the new recharging apparatus.

The other three men were in their own little group, delivering what sounded like a panegyric to watchbird.

Gelsen noticed that all of them stood straight and tall, like the saviors they felt they were. He didn't find it funny. Up to a few days ago he had felt that way himself. He had considered himself a pot-bellied, slightly balding saint.

HE sighed and lighted a cigarette. At the beginning of the project, he had been as enthusiastic as the others. He remembered saying to Macintyre, his chief engineer, "Mac, a new day is coming. Watchbird is the Answer." And Macintyre had nodded very profoundly — another watchbird convert.

How wonderful it had seemed then! A simple, reliable answer to one of mankind's greatest problems, all wrapped and packaged in a pound of incorruptible metal, crystal and plastics.

Perhaps that was the very reason he was doubting it now. Gel-

sen suspected that you don't solve human problems so easily. There had to be a catch somewhere.

After all, murder was an old problem, and watchbird too new a solution.

"Gentlemen—" They had been talking so heatedly that they hadn't noticed the government representative entering. Now the room became quiet at once.

"Gentlemen," the plump government man said, "the President, with the consent of Congress, has acted to form a watchbird division for every city and town in the country."

The men burst into a spontaneous shout of triumph. They were going to have their chance to save the world after all, Gelsen thought, and worriedly asked himself what was wrong with that.

He listened carefully as the government man outlined the distribution scheme. The country was to be divided into seven areas, each to be supplied and serviced by one manufacturer. This meant monopoly, of course, but a necessary one. Like the telephone service, it was in the public's best interests. You couldn't have competition in watchbird service. Watchbird was for everyone.

"The President hopes," the representative continued, "that

full watchbird service will be installed in the shortest possible time. You will have top priorities on strategic metals, manpower, and so forth."

"Speaking for myself," the president of Southern Consolidated said, "I expect to have the first batch of watchbirds distributed within the week. Production is all set up."

THE rest of the men were equally ready. The factories had been prepared to roll out the watchbirds for months now. The final standardized equipment had been agreed upon, and only the Presidential go-ahead had been lacking.

"Fine," the representative said. "If that is all, I think we can—is there a question?"

"Yes, sir," Gelsen said. "I want to know if the present model is the one we are going to manufacture."

"Of course," the representative said. "It's the most advanced."

"I have an objection," Gelsen stood up. His colleagues were glaring coldly at him. Obviously he was delaying the advent of the golden age.

"What is your objection?" the representative asked.

"First, let me say that I am one hundred per cent in favor of a machine to stop murder. It's been needed for a long time. I

object only to the watchbird's learning circuits. They serve, in effect, to animate the machine and give it a pseudo-consciousness. I can't approve of that."

"But, Mr. Gelsen, you yourself testified that the watchbird would not be completely efficient unless such circuits were introduced. Without them, the watchbirds could stop only an estimated seventy per cent of murders."

"I know that," Gelsen said, feeling extremely uncomfortable. "I believe there might be a moral danger in allowing a machine to make decisions that are rightfully Man's," he declared doggedly.

"Oh, come now, Gelsen," one of the corporation presidents said. "It's nothing of the sort. The watchbird will only reinforce the decisions made by honest men from the beginning of time."

"I think that is true," the representative agreed. "But I can understand how Mr. Gelsen feels. It is sad that we must put a human problem into the hands of a machine, sadder still that we must have a machine enforce our laws. But I ask you to remember, Mr. Gelsen, that there is no other possible way of stopping a murderer *before he strikes*. It would be unfair to the many innocent people killed every year if we were to restrict watchbird on philosophical grounds. Don't

you agree that I'm right?"

"Yes, I suppose I do," Gelsen said unhappily. He had told himself all that a thousand times, but something still bothered him. Perhaps he would talk it over with Macintyre.

As the conference broke up, a thought struck him. He grinned.

A lot of policemen were going to be out of work!

"**N**OW what do you think of that?" Officer Celtrics demanded. "Fifteen years in Homicide and a machine is replacing me." He wiped a large red hand across his forehead and leaned against the captain's desk. "Ain't science marvelous?"

Two other policemen, late of Homicide, nodded glumly.

"Don't worry about it," the captain said. "We'll find a home for you in Larceny, Celtrics. You'll like it here."

"I just can't get over it," Celtrics complained. "A lousy little piece of tin and glass is going to solve all the crimes."

"Not quite," the captain said. "The watchbirds are supposed to prevent the crimes before they happen."

"Then how'll they be crimes?" one of the policeman asked. "I mean they can't hang you for murder until you commit one, can they?"

"That's not the idea," the cap-

tain said. "The watchbirds are supposed to stop a man before he commits a murder."

"Then no one arrests him?" Celtrics asked.

"I don't know how they're going to work that out," the captain admitted.

The men were silent for a while. The captain yawned and examined his watch.

"The thing I don't understand," Celtrics said, still leaning on the captain's desk, "is just how do they do it? How did it start, Captain?"

THE captain studied Celtrics' face for possible irony; after all, watchbird had been in the papers for months. But then he remembered that Celtrics, like his sidekicks, rarely bothered to turn past the sports pages.

"Well," the captain said, trying to remember what he had read in the Sunday supplements, "these scientists were working on criminology. They were studying murderers, to find out what made them tick. So they found that murderers throw out a different sort of brain wave from ordinary people. And their glands act funny, too. All this happens when they're about to commit a murder. So these scientists worked out a special machine to flash red or something when these brain waves turned on."

"Scientists," Celtrics said bitterly.

"Well, after the scientists had this machine, they didn't know what to do with it. It was too big to move around, and murderers didn't drop in often enough to make it flash. So they built it into a smaller unit and tried it out in a few police stations. I think they tried one upstate. But it didn't work so good. You couldn't get to the crime in time. That's why they built the watchbirds."

"I don't think they'll stop no criminals," one of the policemen insisted.

"They sure will. I read the test results. They can smell him out before he commits a crime. And when they reach him, they give him a powerful shock or something. It'll stop him."

"You closing up Homicide, Captain?" Celtrics asked.

"Nope," the captain said. "I'm leaving a skeleton crew in until we see how these birds do."

"Hah," Celtrics said. "Skeleton crew. That's funny."

"Sure," the captain said. "Anyhow, I'm going to leave some men on. It seems the birds don't stop all murders."

"Why not?"

"Some murderers don't have these brain waves," the captain answered, trying to remember what the newspaper article had

said. "Or their glands don't work or something."

"Which ones don't they stop?" Celtrics asked, with professional curiosity.

"I don't know. But I hear they got the damned things fixed so they're going to stop all of them soon."

"How they working that?"

"They learn. The watchbirds, I mean. Just like people."

"You kidding me?"

"Nope."

"Well," Celtrics said, "I think I'll just keep old Betsy oiled, just in case. You can't trust these scientists."

"Right."

"Birds!" Celtrics scoffed.

OVER the town, the watchbird soared in a long, lazy curve. Its aluminum hide glistened in the morning sun, and dots of light danced on its stiff wings. Silently it flew.

Silently, but with all senses functioning. Built-in kinesthetics told the watchbird where it was, and held it in a long search curve. Its eyes and ears operated as one unit, searching, seeking.

And then something happened! The watchbird's electronically fast reflexes picked up the edge of a sensation. A correlation center tested it, matching it with electrical and chemical data in its memory files. A relay tripped.

Down the watchbird spiraled, coming in on the increasingly strong sensation. It *smelled* the outpouring of certain glands, *tasted* a deviant brain wave.

Fully alerted and armed, it spun and banked in the bright morning sunlight.

Dinelli was so intent he didn't see the watchbird coming. He had his gun poised, and his eyes pleaded with the big grocer.

"Don't come no closer."

"You lousy little punk," the grocer said, and took another step forward. "Rob me? I'll break every bone in your puny body."

The grocer, too stupid or too courageous to understand the threat of the gun, advanced on the little thief.

"All right," Dinelli said, in a thorough state of panic. "All right, sucker, take—"

A bolt of electricity knocked him on his back. The gun went off, smashing a breakfast food display.

"What in hell?" the grocer asked, staring at the stunned thief. And then he saw a flash of silver wings. "Well, I'm really damned. Those watchbirds work!"

He stared until the wings disappeared in the sky. Then he telephoned the police.

The watchbird returned to his search curve. His thinking center correlated the new facts he had learned about murder. Several of

these he hadn't known before.

This new information was simultaneously flashed to all the other watchbirds and their information was flashed back to him.

New information, methods, definitions were constantly passing between them.

NOW that the watchbirds were rolling off the assembly line in a steady stream, Gelsen allowed himself to relax. A loud contented hum filled his plant. Orders were being filled on time, with top priorities given to the biggest cities in his area, and working down to the smallest towns.

"All smooth, Chief," Macintyre said, coming in the door. He had just completed a routine inspection.

"Fine. Have a seat."

The big engineer sat down and lighted a cigarette.

"We've been working on this for some time," Gelsen said, when he couldn't think of anything else.

"We sure have," Macintyre agreed. He leaned back and inhaled deeply. He had been one of the consulting engineers on the original watchbird. That was six years back. He had been working for Gelsen ever since, and the men had become good friends.

"The thing I wanted to ask you was this—" Gelsen paused. He couldn't think how to phrase what he wanted. Instead he asked, "What do you think of the watchbirds, Mac?"

"Who, me?" The engineer grinned nervously. He had been eating, drinking and sleeping watchbird ever since its inception. He had never found it necessary to have an attitude. "Why, I think it's great."

"I don't mean that," Gelsen said. He realized that what he wanted was to have someone understand his point of view. "I mean do you figure there might be some danger in machine thinking?"

"I don't think so, Chief. Why do you ask?"

"Look, I'm no scientist or engineer. I've just handled cost and production and let you boys worry about how. But as a layman, watchbird is starting to frighten me."

"No reason for that."

"I don't like the idea of the learning circuits."

"But why not?" Then Macintyre grinned again. "I know. You're like a lot of people, Chief—afraid your machines are going to wake up and say, 'What are we doing here? Let's go out and rule the world.' Is that it?"

"Maybe something like that," Gelsen admitted.

"No chance of it," Macintyre said. "The watchbirds are complex, I'll admit, but an M.I.T. calculator is a whole lot more complex. And it hasn't got consciousness."

"No. But the watchbirds can learn."

"Sure. So can all the new calculators. Do you think they'll team up with the watchbirds?"

GELSEN felt annoyed at Macintyre, and even more annoyed at himself for being ridiculous. "It's a fact that the watchbirds can put their learning into action. No one is monitoring them."

"So that's the trouble," Macintyre said.

"I've been thinking of getting out of watchbird." Gelsen hadn't realized it until that moment.

"Look, Chief," Macintyre said. "Will you take an engineer's word on this?"

"Let's hear it."

"The watchbirds are no more dangerous than an automobile, an IBM calculator or a thermometer. They have no more consciousness or volition than those things. The watchbirds are built to respond to certain stimuli, and to carry out certain operations when they receive that stimuli."

"And the learning circuits?"

"You have to have those," Macintyre said patiently, as

though explaining the whole thing to a ten-year-old. "The purpose of the watchbird is to frustrate all murder-attempts, right? Well, only certain murderers give out these stimuli. In order to stop all of them, the watchbird has to search out new definitions of murder and correlate them with what it already knows."

"I think it's inhuman," Gelsen said.

"That's the best thing about it. The watchbirds are unemotional. Their reasoning is non-anthropomorphic. You can't bribe them or drug them. You shouldn't fear them, either."

The intercom on Gelsen's desk buzzed. He ignored it.

"I know all this," Gelsen said. "But, still, sometimes I feel like the man who invented dynamite. He thought it would only be used for blowing up tree stumps."

"You didn't invent watchbird."

"I still feel morally responsible because I manufacture them."

The intercom buzzed again, and Gelsen irritably punched a button.

"The reports are in on the first week of watchbird operation," his secretary told him.

"How do they look?"

"Wonderful, sir."

"Send them in in fifteen minutes." Gelsen switched the intercom off and turned back to

Macintyre, who was cleaning his fingernails with a wooden match. "Don't you think that this represents a trend in human thinking? The mechanical god? The electronic father?"

"Chief," Macintyre said, "I think you should study watchbird more closely. Do you know what's built into the circuits?"

"Only generally."

"First, there is a purpose. Which is to stop living organisms from committing murder. Two, murder may be defined as an act of violence, consisting of breaking, mangling, maltreating or otherwise stopping the functions of a living organism by a living organism. Three, most murderers are detectable by certain chemical and electrical changes."

Macintyre paused to light another cigarette. "Those conditions take care of the routine functions. Then, for the learning circuits, there are two more conditions. Four, there are some living organisms who commit murder without the signs mentioned in three. Five, these can be detected by data applicable to condition two."

"I see," Gelsen said.

"You realize how foolproof it is?"

"I suppose so." Gelsen hesitated a moment. "I guess that's all."

"Right," the engineer said, and left.

Gelsen thought for a few moments. There *couldn't* be anything wrong with the watchbirds.

"Send in the reports," he said into the intercom.

HIGH above the lighted buildings of the city, the watchbird soared. It was dark, but in the distance the watchbird could see another, and another beyond that. For this was a large city.

To prevent murder . . .

There was more to watch for now. New information had crossed the invisible network that connected all watchbirds. New data, new ways of detecting the violence of murder.

There! The edge of a sensation! Two watchbirds dipped simultaneously. One had received the scent a fraction of a second before the other. He continued down while the other resumed monitoring.

Condition four, there are some living organisms who commit murder without the signs mentioned in condition three.

Through his new information, the watchbird knew by extrapolation that this organism was bent on murder, even though the characteristic chemical and electrical smells were absent.

The watchbird, all senses acute, closed in on the organism.

He found what he wanted, and dived.

Roger Greco leaned against a building, his hands in his pockets. In his left hand was the cool butt of a .45. Greco waited patiently.

He wasn't thinking of anything in particular, just relaxing against a building, waiting for a man. Greco didn't know why the man was to be killed. He didn't care. Greco's lack of curiosity was part of his value. The other part was his skill.

One bullet, neatly placed in the head of a man he didn't know. It didn't excite him or sicken him. It was a job, just like anything else. You killed a man. So?

As Greco's victim stepped out of a building, Greco lifted the .45 out of his pocket. He released the safety and braced the gun with his right hand. He still wasn't thinking of anything as he took aim . . .

And was knocked off his feet.

Greco thought he had been shot. He struggled up again, looked around, and sighted fog-gily on his victim.

Again he was knocked down.

This time he lay on the ground, trying to draw a bead. He never thought of stopping, for Greco was a craftsman.

With the next blow, everything went black. Permanently, because the watchbird's duty was

to protect the object of violence—at whatever cost to the murderer.

The victim walked to his car. He hadn't noticed anything unusual. Everything had happened in silence.

GELSEN was feeling pretty good. The watchbirds had been operating perfectly. Crimes of violence had been cut in half, and cut again. Dark alleys were no longer mouths of horror. Parks and playgrounds were not places to shun after dusk.

Of course, there were still rob-

beries. Petty thievery flourished, and embezzlement, larceny, forgery and a hundred other crimes.

But that wasn't so important. You could regain lost money—never a lost life.

Gelsen was ready to admit that he had been wrong about the watchbirds. They were doing a job that humans had been unable to accomplish.

The first hint of something wrong came that morning.

Macintyre came into his office. He stood silently in front of Gelsen's desk, looking annoyed and a little embarrassed.



"What's the matter, Mac?" Gelsen asked.

"One of the watchbirds went to work on a slaughterhouse man. Knocked him out."

Gelsen thought about it for a moment. Yes, the watchbirds would do that. With their new learning circuits, they had probably defined the killing of animals as murder.

"Tell the packers to mechanize their slaughtering," Gelsen said. "I never liked that business myself."

"All right," Macintyre said. He pursed his lips, then shrugged his shoulders and left.

Gelsen stood beside his desk, thinking. Couldn't the watchbirds differentiate between a murderer and a man engaged in a legitimate profession? No, evidently not. To them, murder was murder. No exceptions. He frowned. That might take a little



ironing out in the circuits.

But not too much, he decided hastily. Just make them a little more discriminating.

He sat down again and buried himself in paperwork, trying to avoid the edge of an old fear.

THEY strapped the prisoner into the chair and fitted the



electrode to his leg.

"Oh, oh," he moaned, only half-conscious now of what they were doing.

They fitted the helmet over his shaved head and tightened the last straps. He continued to moan softly.

And then the watchbird swept in. How he had come, no one knew. Prisons are large and strong, with many locked doors, but the watchbird was there—

To stop a murder.

"Get that thing out of here!" the warden shouted, and reached for the switch. The watchbird knocked him down.

"Stop that!" a guard screamed, and grabbed for the switch himself. He was knocked to the floor beside the warden.

"This isn't murder, you idiot!" another guard said. He drew his gun to shoot down the glittering, wheeling metal bird.

Anticipating, the watchbird smashed him back against the wall.

There was silence in the room. After a while, the man in the helmet started to giggle. Then he stopped.

The watchbird stood on guard, fluttering in mid-air—

Making sure no murder was done.

New data flashed along the watchbird network. Unmonitored, independent, the thousands

of watchbirds received and acted upon it.

The breaking, mangling or otherwise stopping the functions of a living organism by a living organism. New acts to stop.

"Damn you, git going!" Farmer Ollister shouted, and raised his whip again. The horse balked, and the wagon rattled and shook at he edged sideways.

"You lousy hunk of pigmeal, git going!" the farmer yelled and he raised the whip again.

It never fell. An alert watchbird, sensing violence, had knocked him out of his seat.

A living organism? What is a living organism? The watchbirds extended their definitions as they became aware of more facts. And, of course, this gave them more work.

The deer was just visible at the edge of the woods. The hunter raised his rifle, and took careful aim.

He didn't have time to shoot.

WITH his free hand, Gelsen mopped perspiration from his face. "All right," he said into the telephone. He listened to the stream of vituperation from the other end, then placed the receiver gently in its cradle.

"What was that one?" Macintyre asked. He was unshaven, tie loose, shirt unbuttoned.

"Another fisherman," Gelsen

said. "It seems the watchbirds won't let him fish even though his family is starving. What are we going to do about it, he wants to know."

"How many hundred is that?"

"I don't know. I haven't opened the mail."

"Well, I figured out where the trouble is," Macintyre said gloomily, with the air of a man who knows just how he blew up the Earth—after it was too late.

"Let's hear it."

"Everybody took it for granted that we wanted all murder stopped. We figured the watchbirds would think as we do. We ought to have qualified the conditions."

"I've got an idea," Gelsen said, "that we'd have to know just why and what murder is, before we could qualify the conditions properly. And if we knew that, we wouldn't need the watchbirds."

"Oh, I don't know about that. They just have to be told that some things which look like murder are not murder."

"But why should they stop fisherman?" Gelsen asked.

"Why shouldn't they? Fish and animals are living organisms. We just don't think that killing them is murder."

The telephone rang. Gelsen glared at it and punched the intercom. "I told you no more

calls, no matter what."

"This is from Washington," his secretary said. "I thought you'd—"

"Sorry." Gelsen picked up the telephone. "Yes. Certainly is a mess . . . Have they? All right, I certainly will." He put down the telephone.

"Short and sweet," he told Macintyre. "We're to shut down temporarily."

"That won't be so easy," Macintyre said. "The watchbirds operate independent of any central control, you know. They come back once a week for a repair checkup. We'll have to turn them off then, one by one."

"Well, let's get to it. Monroe over on the Coast has shut down about a quarter of his birds."

"I think I can dope out a restricting circuit," Macintyre said.

"Fine," Gelsen replied bitterly. "You make me very happy."

THE watchbirds were learning rapidly, expanding and adding to their knowledge. Loosely defined abstractions were extended, acted upon and re-extended.

To stop murder . . .

Metal and electrons reason well, but not in a human fashion.

A living organism? Any living organism!

The watchbirds set themselves the task of protecting all living things.

The fly buzzed around the room, lighting on a table top, pausing a moment, then darting to a window sill.

The old man stalked it, a rolled newspaper in his hand.

Murderer!

The watchbirds swept down and saved the fly in the nick of time.

The old man writhed on the floor a minute and then was silent. He had been given only a mild shock, but it had been enough for his fluttery, cranky heart.

His victim had been saved, though, and this was the important thing. Save the victim and give the aggressor his just deserts.

GELSEN demanded angrily. "Why aren't they being turned off!"

The assistant control engineer gestured. In a corner of the repair room lay the senior control engineer. He was just regaining consciousness.

"He tried to turn one of them off," the assistant engineer said. Both his hands were knotted together. He was making a visible effort not to shake.

"That's ridiculous. They haven't got any sense of self-preservation."

"Then turn them off yourself. Besides, I don't think any more

are going to come."

What could have happened? Gelsen began to piece it together. The watchbirds still hadn't decided on the limits of a living organism. When some of them were turned off in the Monroe plant, the rest must have correlated the data.

So they had been forced to assume that they were living organisms, as well.

No one had ever told them otherwise. Certainly they carried on most of the functions of living organisms.

Then the old fears hit him. Gelsen trembled and hurried out of the repair room. He wanted to find Macintyre in a hurry.

THE nurse handed the surgeon the sponge.

"Scalpel."

She placed it in his hand. He started to make the first incision. And then he was aware of a disturbance.

"Who let that thing in?"

"I don't know," the nurse said, her voice muffled by the mask.

"Get it out of here."

The nurse waved her arms at the bright winged thing, but it fluttered over her head.

The surgeon proceeded with the incision—as long as he was able.

The watchbird drove him away and stood guard.

"Telephone the watchbird company!" the surgeon ordered. "Get them to turn the thing off."

The watchbird was preventing violence to a living organism.

The surgeon stood by helplessly while his patient died.

FLUTTERING high above the network of highways, the watchbird watched and waited. It had been constantly working for weeks now, without rest or repair. Rest and repair were impossible, because the watchbird couldn't allow itself—a living organism—to be murdered. And that was what happened when watchbirds returned to the factory.

There was a built-in order to return, after the lapse of a certain time period. But the watchbird had a stronger order to obey—preservation of life, including its own.

The definitions of murder were almost infinitely extended now, impossible to cope with. But the watchbird didn't consider that. It responded to its stimuli, whenever they came and whatever their source.

There was a new definition of living organism in its memory files. It had come as a result of the watchbird discovery that watchbirds were living organisms. And it had enormous ramifications.

The stimuli came! For the hundredth time that day, the bird wheeled and banked, dropping swiftly down to stop murder.

Jackson yawned and pulled his car to a shoulder of the road. He didn't notice the glittering dot in the sky. There was no reason for him to. Jackson wasn't contemplating murder, by any human definition.

This was a good spot for a nap, he decided. He had been driving for seven straight hours and his eyes were starting to fog. He reached out to turn off the ignition key—

And was knocked back against the side of the car.

"What in hell's wrong with you?" he asked indignantly. "All I want to do is—" He reached for the key again, and again he was smacked back.

Jackson knew better than to try a third time. He had been listening to the radio and he knew what the watchbirds did to stubborn violators.

"You mechanical jerk," he said to the waiting metal bird. "A car's not alive. I'm not trying to kill it."

But the watchbird only knew that a certain operation resulted in stopping an organism. The car was certainly a functioning organism. Wasn't it of metal, as were the watchbirds? Didn't it run?

MACINTYRE said, "Without repairs they'll run down." He shoved a pile of specification sheets out of his way.

"How soon?" Gelsen asked.

"Six months to a year. Say a year, barring accidents."

"A year," Gelsen said. "In the meantime, everything is stopping dead. Do you know the latest?"

"What?"

"The watchbirds have decided that the Earth is a living organism. They won't allow farmers to break ground for plowing. And, of course, everything else is a living organism—rabbits, beetles, flies, wolves, mosquitoes, lions, crocodiles, crows, and smaller forms of life such as bacteria."

"I know," Macintyre said.

"And you tell me they'll wear out in six months or a year. What happens now? What are we going to eat in six months?"

The engineer rubbed his chin. "We'll have to do something quick and fast. Ecological balance is gone to hell."

"Fast isn't the word. Instantaneously would be better." Gelsen lighted his thirty-fifth cigarette for the day. "At least I have the bitter satisfaction of saying, 'I told you so.' Although I'm just as responsible as the rest of the machine-worshipping fools."

Macintyre wasn't listening. He was thinking about watchbirds.

"Like the rabbit plague in Australia."

"The death rate is mounting," Gelsen said. "Famine. Floods. Can't cut down trees. Doctors can't—what was that you said said about Australia?"

"The rabbits," Macintyre repeated. "Hardly any left in Australia now."

"Why? How was it done?"

"Oh, found some kind of germ that attacked only rabbits. I think it was propagated by mosquitos—"

"Work on that," Gelsen said. "You might have something. I want you to get on the telephone, ask for an emergency hookup with the engineers of the other companies. Hurry it up. Together you may be able to dope out something."

"Right," Macintyre said. He grabbed a handful of blank paper and hurried to the telephone.

"**W**HAT did I tell you?" Officer Celtrics said. He grinned at the captain. "Didn't I tell you scientists were nuts?"

"I didn't say you were wrong, did I?" the captain asked.

"No, but you weren't sure."

"Well, I'm sure now. You'd better get going. There's plenty of work for you."

"I know." Celtrics drew his revolver from its holster, checked it and put it back. "Are all the

boys back, Captain?"

"All?" the captain laughed humorlessly. "Homicide has increased by fifty per cent. There's more murder now than there's ever been."

"Sure," Celtrics said. "The watchbirds are too busy guarding cars and slugging spiders." He started toward the door, then turned for a parting shot.

"Take my word, Captain. Machines are *stupid*."

The captain nodded.

THOUSANDS of watchbirds, trying to stop countless millions of murders — a hopeless task. But the watchbirds didn't hope. Without consciousness, they experienced no sense of accomplishment, no fear of failure. Patiently they went about their jobs, obeying each stimulus as it came.

They couldn't be everywhere at the same time, but it wasn't necessary to be. People learned quickly what the watchbirds didn't like and refrained from doing it. It just wasn't safe. With their high speed and superfast senses, the watchbirds got around quickly.

And now they meant business. In their original directives there had been a provision made for killing a murderer, if all other means failed.

Why spare a murderer?

It backfired. The watchbirds extracted the fact that murder and crimes of violence had increased geometrically since they had begun operation. This was true, because their new definitions increased the possibilities of murder. But to the watchbirds, the rise showed that the first methods had failed.

Simple logic. If A doesn't work, try B. The watchbirds shocked to kill.

Slaughterhouses in Chicago stopped and cattle starved to death in their pens, because farmers in the Midwest couldn't cut hay or harvest grain.

No one had told the watchbirds that all life depends on carefully balanced murders.

Starvation didn't concern the watchbirds, since it was an act of omission.

Their interest lay only in acts of commission.

Hunters sat home, glaring at the silver dots in the sky, longing to shoot them down. But for the most part, they didn't try. The watchbirds were quick to sense the murder intent and to punish it.

Fishing boats swung idle at their moorings in San Pedro and Gloucester. Fish were living organisms.

Farmers cursed and spat and died, trying to harvest the crop. Grain was alive and thus worthy

of protection. Potatoes were as important to the watchbird as any other living organism. The death of a blade of grass was equal to the assassination of a President—

To the watchbirds.

And, of course, certain machines were living. This followed, since the watchbirds were machines and living.

God help you if you maltreated your radio. Turning it off meant killing it. Obviously—its voice was silenced, the red glow of its tubes faded, it grew cold.

The watchbirds tried to guard their other charges. Wolves were slaughtered, trying to kill rabbits. Rabbits were electrocuted, trying to eat vegetables. Creepers were burned out in the act of strangling trees.

A butterfly was executed, caught in the act of outraging a rose.

This control was spasmodic, because of the fewness of the watchbirds. A billion watchbirds couldn't have carried out the ambitious project set by the thousands.

The effect was of a murderous force, ten thousand bolts of irrational lightning raging around the country, striking a thousand times a day.

Lightning which anticipated your moves and punished your intentions.

"GENTLEMEN, *please*," the government representative begged. "We must hurry."

The seven manufacturers stopped talking.

"Before we begin this meeting formally," the president of Monroe said, "I want to say something. We do not feel ourselves responsible for this unhappy state of affairs. It was a government project; the government must accept the responsibility, both moral and financial."

Gelsen shrugged his shoulders. It was hard to believe that these men, just a few weeks ago, had been willing to accept the glory of saving the world. Now they wanted to shrug off the responsibility when the salvation went amiss.

"I'm positive that that need not concern us now," the representative assured him. "We must hurry. You engineers have done an excellent job. I am proud of the cooperation you have shown in this emergency. You are hereby empowered to put the outlined plan into action."

"Wait a minute," Gelsen said.

"There is no time."

"The plan's no good."

"Don't you think it will work?"

"Of course it will work. But I'm afraid the cure will be worse than the disease."

The manufacturers looked as though they would have enjoyed

throttling Gelsen. He didn't hesitate.

"Haven't we learned yet?" he asked. "Don't you see that you can't cure human problems by mechanization?"

"Mr. Gelsen," the president of Monroe said, "I would enjoy hearing you philosophize, but, unfortunately, people are being killed. Crops are being ruined. There is famine in some sections of the country already. The watchbirds must be stopped at once!"

"Murder must be stopped, too. I remember all of us agreeing upon that. But this is not the way!"

"What would you suggest?" the representative asked.

GELSEN took a deep breath. What he was about to say took all the courage he had.

"Let the watchbirds run down by themselves," Gelsen suggested.

There was a near-riot. The government representative broke it up.

"Let's take our lesson," Gelsen urged, "admit that we were wrong trying to cure human problems by mechanical means. Start again. Use machines, yes, but not as judges and teachers and fathers."

"Ridiculous," the representative said coldly. "Mr. Gelsen, you are overwrought. I suggest

you control yourself." He cleared his throat. "All of you are ordered by the President to carry out the plan you have submitted." He looked sharply at Gelsen. "Not to do so will be treason."

"I'll cooperate to the best of my ability," Gelsen said.

"Good. Those assembly lines must be rolling within the week."

Gelsen walked out of the room alone. Now he was confused again. Had he been right or was he just another visionary? Certainly, he hadn't explained himself with much clarity.

Did he know what he meant?

Gelsen cursed under his breath. He wondered why he couldn't ever be sure of anything. Weren't there any values he could hold on to?

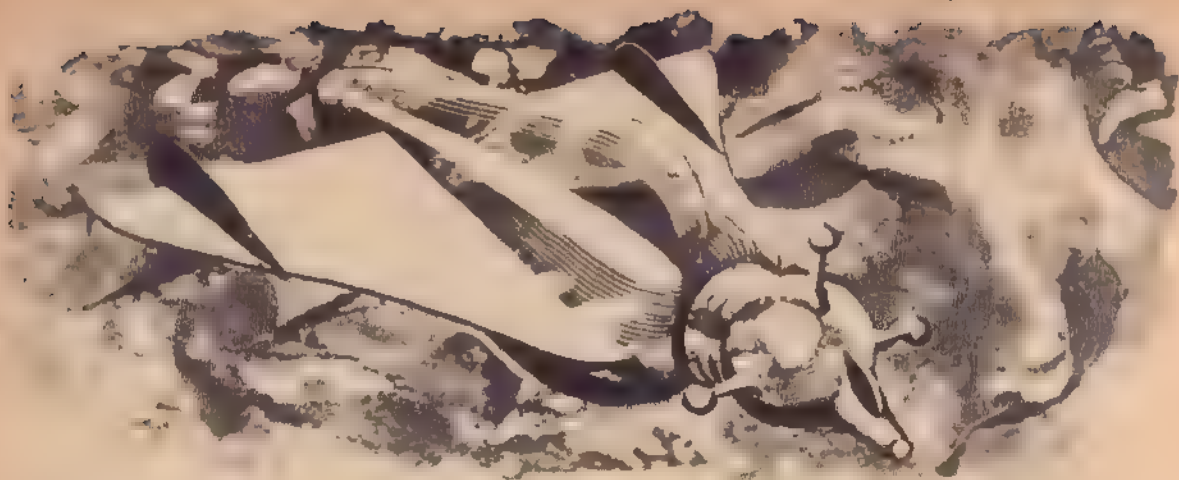
He hurried to the airport and to his plant.

THE watchbird was operating erratically now. Many of its delicate parts were out of line, worn by almost continuous operation. But gallantly it responded when the stimuli came.

A spider was attacking a fly. The watchbird swooped down to the rescue.

Simultaneously, it became aware of something overhead. The watchbird wheeled to meet it.

There was a sharp crackle and a power bolt whizzed by the



watchbird's wing. Angrily, it spat a shock wave.

The attacker was heavily insulated. Again it spat at the watchbird. This time, a bolt smashed through a wing. The watchbird darted away, but the attacker went after it in a burst of speed, throwing out more crackling power.

The watchbird fell, but managed to send out its message. Urgent! A new menace to living organisms and this was the deadliest yet!

Other watchbirds around the country integrated the message. Their thinking centers searched for an answer.

"**W**ELL, Chief, they bagged fifty today," Macintyre said, coming into Gelsen's office.

"Fine," Gelsen said, not looking at the engineer.

"Not so fine." Macintyre sat down. "Lord, I'm tired! It was

seventy-two yesterday."

"I know." On Gelsen's desk were several dozen lawsuits, which he was sending to the government with a prayer.

"They'll pick up again, though," Macintyre said confidently. "The Hawks are especially built to hunt down watchbirds. They're stronger, faster, and they've got better armor. We really rolled them out in a hurry, huh?"

"We sure did."

"The watchbirds are pretty good, too," Macintyre had to admit. "They're learning to take cover. They're trying a lot of stunts. You know, each one that goes down tells the others something."

Gelsen didn't answer.

"But anything the watchbirds can do, the Hawks can do better," Macintyre said cheerfully. "The Hawks have special learning circuits for hunting. They're

more flexible than the watchbirds. They learn faster."

Gelsen gloomily stood up, stretched, and walked to the window. The sky was blank. Looking out, he realized that his uncertainties were over. Right or wrong, he had made up his mind.

"Tell me," he said, still watching the sky, "what will the Hawks hunt after they get all the watchbirds?"

"Huh?" Macintyre said. "Why—"

"Just to be on the safe side, you'd better design something to hunt down the Hawks. Just in case, I mean."

"You think—"

"All I know is that the Hawks are self-controlled. So were the watchbirds. Remote control would have been too slow, the argument went on. The idea was to get the watchbirds and get them fast. That meant no restricting circuits."

"We can dope something out," Macintyre said uncertainly.

"You've got an aggressive machine up in the air now. A murder machine. Before that it was an anti-murder machine. Your next gadget will have to be even more self-sufficient, won't it?"

Macintyre didn't answer.

"I don't hold you responsible," Gelsen said. "It's me. It's everyone."

In the air outside was a swift-moving dot.

"That's what comes," said Gelsen, "of giving a machine the job that was our own responsibility."

OVERHEAD, a Hawk was zeroing in on a watchbird.

The armored murder machine had learned a lot in a few days. Its sole function was to kill. At present it was impelled toward a certain type of living organism, metallic like itself.

But the Hawk had just discovered that there were other types of living organisms, too—

Which had to be murdered.

—ROBERT SHECKLEY





GALAXY'S 5 Star Shelf

PLAYER PIANO by Kurt Vonnegut, Jr. Charles Scribner's Sons, New York, 1952, 296 pages, \$3.00

HERE is a sharp-pointed weapon — a biting, vividly alive and very effectively understated anti-Utopia. It deals with the cybernetic future of the U.S.A., a future in which all jobs of repetitive or patternable nature have been eliminated, and the workers have been replaced by self-operating machines.

This is not primarily a novel of revolt against the machine, however; it deals only glancingly with the fate of the disemployed.

What it does is examine the mores and miseries of the managerial-engineering group that has become the nation's leaders, its elites.

The author takes one man, Dr. Paul Proteus, son of the first national technological dictator and (at first without knowing it) a rebel, and studies his decline and fall. In the process, Vonnegut reviews with bright venom the apotheoses of advertising, Chamber of Commercialism, joinerism, and vulgarity that the new society has arrived at, with particular emphasis on the moral climate of the time. This involves, fanatical emphasis on

loyalty to the machine itself.

The greatest crime of the society is sabotage of the machine—not murder of the human being; for this is the level to which the thinking of the *elites* in this disturbing and highly entertaining book has arrived.

But Vonnegut gives the “people” their part of the stage, too. Most of them are either in the armed forces or the “Wrecks and Reeks” — Reconstruction and Reclamation Corps, the WPA-PWA of the future. Some are still trying to make do as bartenders, gamblers, and members of other ancient “fringe” professions such as hotel-keeping and whatnot. And all are completely demoralized, defeated, decadent.

They are given practically everything they want in the way of mechanical equipment (one must maintain markets and keep the machines rolling, mustn’t one?) but they have lost their reason for being, their independence.

Throughout the book, as a sort of Zadigan counterpoint, we keep meeting the Shah of Bratpuhr, touring America under the aegis of the State Department, who cannot be dissuaded from his contended analysis of the lower classes (90 per cent of the people) as *takaru*; i.e., slaves.

For readers who think well of the chances of individual man

under a cybernetic economy, this book will have a very, very nasty flavor. Which is why we others will like it very much indeed!

ACROSS THE SPACE FRONTIER. Edited by Cornelius Ryan. Viking Press, New York, 1952. 164 pages, profusely illustrated, \$3.95

SUPERLATIVES sufficiently gaudy to describe this book are hard to find. This is it, friends—the real interplanetary tomorrow!

The difference between all previous books on space flight and this book is in essence the difference between science fiction and science.

In the past, it has been, “This is the way it *might* be, *if*—” But with this magnificent volume it becomes, “This is the way it *will* be.”

It has been written by a group of scientists and engineers who really know the practical realities of airless flight; and it seems, after one finally puts the book down, breathless, that there are practically no questions which they have not answered.

The book is based on material originally presented at the First Symposium on Space Travel, held on Columbus Day, 1951, at the Hayden Planetarium, New York, and more fully developed

in a special issue of *Colliers*, March 22, 1952.

Contributors are: Joseph Kaplan, Professor of Physics; Werner von Braun, co-designer of the German V-2 rocket; Heinz Haber, specialist in the medical aspects of airless, weightless flight; our own Willy Ley, who was one of the original organizers of the symposium; Oscar Schachter, deputy director of the Legal Division of the United Nations; and Fred Whipple, Chairman of the Department of Astronomy at Harvard University.

Not a single visionary among them!

The magnificent illustrations (ten in full color) by Chesley Bonestell, Fred Freeman and Rolf Klep make tangible the machines and the nature of space flight that the book describes. They are almost frighteningly real!

The only cavil one might have against the book is the way in which it tries to "sell" space travel for strictly military reasons.

Gentlemen, please do not forget that scientific progress can be made in peacetime. There's no law against it, is there? Of course, it'll be easier to raise the needed four billions for the first space station during war; but what's the point if we end up using it to destroy Earth? We might just as well have stood in bed!

28 SCIENCE FICTION STORIES by H. G. Wells. Dover Publications, Inc., New York, 1952. 924 pages, \$3.95

ANOTHER whopping Dover omnibus can now be put on the shelf along with the previous Wells and Haggard novel collections. This one just about, but not quite, puts all of Wells's science fantasy back in print. A few utopian novels, many of them dull, remain unreprinted.

Every science fiction short story is in this book, plus two novels—*Men Like Gods* and *Star Begotten*. Omitted are six straight fantasies, which would have violated the "science fiction" promise of the title.

However, what is offered here is so wonderful that the omissions are not noticeable (except to the editor of the volume—the undersigned.) The facts are that Wells's science fiction short stories are still among the finest ever written.

BEACHHEADS IN SPACE, edited by August Derleth. Pellegrini & Cudahy, New York, 1952. 320 pages, \$3.95

MR. Derleth's twelfth anthology contains 14 stories, 5 of which are A, 2 are B-, one is C, and 6 are D or D-. This is really what we reviewers are prone to

define as an "uneven" selection.

Six stories deal with invaders of Earth; 6 with Terran explorations of space; and 2 serve as beginning and ending of the volume. Class A stories are Simak's "Beachhead," van Vogt's "Repetition," Russell's previously anthologized "Metamorphosite," Asimov's "Breeds There A Man . . .?" and Wyndham's "And the Walls Came Tumbling Down." The rest of the tales (even the mildly "B" ones) we really can do without.

The idea behind the book is good, though not original. It is unfortunate that it is filled out with such a thin and inadequate group of tales.

THE LONG LOUD SILENCE
by Wilson Tucker. Rinehart & Co., New York, 1952. 217 pages, \$2.50

WILSON ("Bob") Tucker's second science fiction novel is in the classic tradition of the wandering few humans living in a largely destroyed world or continent.

Unfortunately, it can claim little of the imaginative richness or the philosophic perceptions that other tales in this category have possessed.

Nevertheless, it is easily readable, and will serve to pass a couple of hours without boredom.

The "Enemy" has knocked out the U.S.A. east of the Mississippi with plague germs and only a few immune plague-carriers survive. Atom bombs, of course, preceded the germ warfare. West of the Big River, the "Enemy" did nothing, and civilization marches on there, including radio commercials and the like.

The story tells about the dirty adventures of a heel who happened to be among the few immune carriers east of the Mississippi, and who eventually managed to cross to the west side. There he spreads plague along with his criminal ventures.

GREEN FIRE, by John Taine. Fantasy Publishing Co., Inc., Los Angeles, 1952. 313 pages, \$3.00

I HAVE not read all of Taine's stories, only about six or eight; and I have read a lot of science fiction by other people. This is just about the worst yet, and its reprinting at this late date (it was originally published by Dutton in 1928) can only weaken science fiction and damage Dr. Eric Bell's ("John Taine's") reputation.

The story is about a crazy scientist who learns how to dissolve the Universe and who darn near does so.

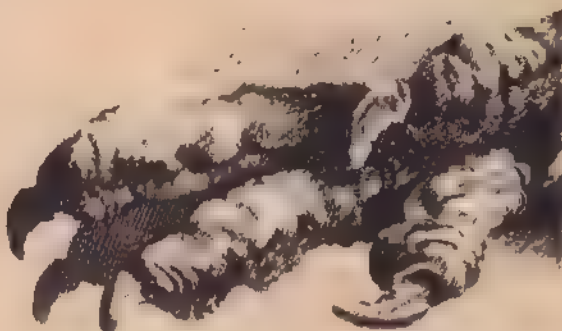
A pox upon him!

—GROFF CONKLIN

know thy neighbor

By ELISABETH R. LEWIS

*The terrors that inhabit the
night may be even more awful
in deceitful broad daylight!*



IT BEGAN with the dead cat on the fire escape and ended with the green monster in the incinerator chute, but still, it wouldn't be quite fair to blame it all on the neighborhood . . .

The apartment house was in the heart of the district that is known as "The Tenderloin"—that section of San Francisco from Ellis to Market and east from Leavenworth to Mason

Street. Not the best section.

To Ellen's mind, it was an unsavory neighborhood, but with apartments so hard to get and this one only \$38.00 a month and in a regular apartment building with an elevator and all—well, as she often told the girls at the office, you can't be too particular these days.

Nevertheless, it was an ordeal to walk up the two blocks from



Illustrated by TOM BEECHAM

Market Street, particularly at night when the noise of juke boxes dinned from the garish bars, when the sidewalks spilled over with soldiers and sailors, with peroxidized, blowsy-looking women and the furtive gamblers who haunted the back rooms of the innocent-appearing cigar stores that lined the street. She walked very fast then, never looking to left or right, and her heart would pound

when a passing male whistled.

But once inside the apartment house lobby, she relaxed. In spite of its location, the place seemed very respectable. She seldom met anyone in the lobby or the elevator and, except on rare occasions like last night, the halls were as silent as those in the swanky apartment houses on Nob Hill.

She knew by sight only two

of her neighbors—the short, stocky young man who lived in 410, and Mrs. Moffatt, in 404. Mrs. Moffatt was the essence of lavender and old lace, and the young man—he was all right, really; you couldn't honestly say he was shady-looking.

ON THIS particular morning, the man from 410 was waiting for the elevator when Ellen came out to get her paper. He glanced up at the sound of the door and stared. Quickly, she shut the door again. She didn't like the way he looked at her. She was wearing a housecoat over her nightgown, and a scarf wrapped around her head to cover the bobbypins—a costume as unrevealing as a nun's—but she felt as though he had invaded her privacy with his stare, like surprising her in the bathtub.

She waited until she heard the elevator start down before opening her door again. The boy must have aimed from the stairs; her paper was several yards down the hall, almost in front of 404. She went down to get it.

Mrs. Moffatt must have heard Ellen's footsteps in the hall. An old lady with a small income (from her late husband, as she had explained to Ellen) and little to do, she was intensely interested in her neighbors. She opened the door of her apartment and

peered out. Her thin white hair was done up in tight kid curlers. With her round faded-blue eyes and round wrinkled-apple cheeks, she looked like an inquisitive aged baby.

"Good morning," said Ellen pleasantly.

"Good morning, my dear," the old lady answered. "You're up early for a Saturday."

"Well, I thought I might as well get up and start my housecleaning. I didn't sleep a wink after four o'clock this morning anyway. Did you hear all that racket in the hall?"

"Why, no, I didn't." The old lady sounded disappointed. "I don't see how I missed it. I guess because I went to bed so late. My nephews—you've seen them, haven't you?—They're such nice boys. They took me to a movie last night."

"Well, I'm surprised you didn't hear it," said Ellen. "Thumping and scratching, like somebody was dragging a rake along the floor. I just couldn't get back to sleep."

The old lady clicked her tongue. "I'll bet somebody came home drunk. Isn't that terrible? I wonder who it was."

"I don't know," said Ellen, "but it was certainly a disgrace. I was going to call Mrs. Anderson."

With the door open, the hall seemed filled with the very odd

odor of Mrs. Moffatt's apartment—not really unpleasant, but musty, with the smell of antiques. The apartment itself was like a museum. Ellen had been inside once when the old lady invited her in for a cup of tea. Its two rooms were crammed with a bizarre assortment of furniture, bric-a-brac and souvenirs.

"Oh, how's your bird this morning?" Ellen asked.

In addition to being a collector, Mrs. Moffatt was an animal fancier. She owned three cats, a pair of love-birds, goldfish, and even a cage of white mice. One of the love-birds, she had informed Ellen yesterday, was ailing.

"Oh, Buzzy's much better today," she beamed. "The doctor told me to feed him whisky every three hours—with an eyedropper, you know—and you'd be surprised how it helped the little fellow. He even ate some birdseed this morning."

"I'm so glad," said Ellen. She picked up her paper and smiled at Mrs. Moffatt. "I'll see you later."

The old woman closed her door, shutting off the musty smell, and Ellen walked back to her own apartment. She filled the coffee pot with water and four tablespoons of coffee, then dressed herself while the coffee percolated. Standing in front of the

medicine cabinet mirror, she took the bobbypins out of her hair. Her reflection looked back at her from the mirror, and she felt that unaccountable depression again. I'm not bad-looking, she thought, and young, and not too dumb. What have other women got that I haven't? She thought of the days and years passing, the meals all alone, and nothing ever happening.

That kind of thinking gets you nowhere; forget it. She combed her hair back, pinned it securely behind her ears, ran a lipstick over her mouth. Then she went into the kitchenette, turned off the gas flame under the coffee pot, and raised the window shade to let in the sun that was just beginning to show through morning fog.

A dead cat lay on the fire escape under the window.

SHE stared at it, feeling sick to her stomach. It was an ordinary gray cat, the kind you see in every alley, but its head was twisted back so that its open eyes and open mouth leered at her.

She pulled the blind down, fast.

Sit down, light a cigarette. It's nothing, just a dead cat, that's all. But how did it get on the fire escape? Fell, maybe, from the roof? And how did it get on the roof? Besides, I thought cats

never got hurt falling. Isn't there something about landing on your feet like a cat? Maybe that's just a legend, like the nonsense about nine lives.

Well, what do I do, she thought. I can't sit here and drink coffee with *that* under the window. And God knows I can't take it away myself. She shuddered at the thought. Call the manager.

She got up and went to the telephone in the foyer. She found the number scribbled on the back of the phone book. Her hand was shaking when she dialed.

"This is Ellen Tighe in 402. Mrs. Anderson, there's a dead cat on the fire escape outside my window. You'll have to do something about it."

Mrs. Anderson sounded half-asleep. "What do you mean, a dead cat? Are you sure it's dead? Maybe it's sleeping."

"Of course I'm sure it's dead! Can't you send Pete up to take it away? It's a horrible thing to have under my window."

"All right, I'll tell Pete to go up. He's washing down the lobby now. As soon as he's finished, I'll send him up."

Ellen set the phone back on its stand. She felt a little silly. What a fuss to make over a dead cat. But really, outside one's window—and before breakfast—who could blame me?

She went back into the kitchenette, carefully not looking toward the window, even though the shade was drawn, and poured herself a cup of coffee. Then she sat at the table in the little nook, drinking coffee, smoking a cigarette and leafing through the paper.

The front page was all about a flying saucer scare in Marin County. She read the headline, then thumbed on through the paper, stopping to read the movie reviews and the comic page.

AT THE back section, she was attracted by a headline that read: "Liquor Strong These Days—Customer Turns Green, Says Bartender." It was a brief item, consciously cute. "John Martin, 38, a bartender of 152 Mason Street, was arrested early this morning, charged with drunkenness and disturbing the peace, after firing several shots from a .38 revolver on the sidewalk in front of his address. No one was injured. Martin's defense, according to police records, was that he was attempting to apprehend a 'pale-green, claw-handed' customer who fled after eating a live mouse and threatening Martin.

"Upon questioning, Martin admitted that the unidentified customer had been in the bar for several hours and appeared per-

fectly normal. But he insisted, 'When I refused to serve him after he ate the mouse, he turned green and threatened to claw me to death.' Martin has a permit to carry the gun and was dismissed with a fifty dollar fine and a warning by Judge Greely against sampling his own stock too freely."

Drunken fool, thought Ellen. With fresh indignation, she remembered the disturbance in her own hall this morning. Nothing but drunks and gangsters in this neighborhood. She thought vaguely of looking at the "For Rent" section of the want ads.

There was a noise on the fire escape. Ellen reached over and lifted up the shade. The janitor was standing there with a big paper sack in his hand.

Ellen opened the window and asked, "How do you think it got there, Pete?"

"I dunno. Maybe fall offa the roof. Musta been in a fight."

"What makes you think so?"

"Neck's all torn. Big teeth marks. Maybe dog get him."

"Up here?"

"Somebody find, maybe throw here—I dunno." Pete scratched his head. "You don't worry any more, though. I take away now. No smell, even."

He grinned at her and scuttled to the other end of the fire escape where he climbed through the

window to the fourth floor corridor.

Ellen poured herself a second cup of coffee and lighted another cigarette, then turned to the woman's page in the paper. She read the Advice Column and the Psychology and glanced through the "Help Wanted—Women" in the classifieds. That finished the morning's reading. She looked at her watch. Almost ten.

She carried her coffee cup to the sink, rinsed it out and set it on the drainboard. There was still a cup or more coffee left in the pot. That could be warmed over later, but she took out the filler and dumped the grounds into the paper bag that held garbage. The bag was almost full.

I'll throw it in the incinerator now, she thought, before I straighten the apartment.

She emptied the ashtrays—the one beside her bed and the other on the breakfast table—then started down the hall with the garbage bag in her hand.

THE incinerator chute was at the rear of the hall, next to the service stairs. Ellen could see the door standing slightly open. She hesitated. 410 might be there. It was bad enough to ride in the elevator with him, feeling his eyes on her, but there was something unbearably intimate about

standing beside him, emptying garbage.

The door seemed to move a little, but nobody came out. She waited another minute. Oh, well, maybe the last person out there just forgot to shut the door tight. She opened it wider, stepped out on the stair landing. No one was there.

The chute was wide, almost three feet around. Ellen opened the top and started to throw the bag down. Something was stuck in there. Her eyes saw it, but her brain refused to believe.

What was there, blocking the chute, looked like—looked like—a chicken's foot, gnarled, clawed, but as large as a human foot—and an ugly, sickly green!

Automatically, she reached in and clutched it. Her stomach turned at the cold feel of the thing, but still she tugged at it, trying to work it loose. It was heavy. She pulled with all her strength, felt it start to slide back up the chute. Then it was free!

She gaped in sick horror at the thing she held. Her hand opened weakly and she sat down on the floor, her head swimming and her throat muscles retching. Dimly, she heard the thing rattle and bump down to the incinerator in the basement.

The full horror of it gradually hit home. Ellen stood up, swaying, and ran blindly down the

hall. Her feet thudded on the carpeted floor. As she passed 404, she was vaguely conscious of Mrs. Moffatt's concerned face poking around the door.

"Is there something wrong, Miss Tighe?"

"No," Ellen managed to gasp "It's all right—really—all right."

She kept on running, burst through the apartment door, slammed it behind her, fell on her knees in the bathroom and became thoroughly, violently ill.

She continued to kneel, unable to think, her head against the cool porcelain bowl. Finally, she stood up weakly, ran cold water, washed her face and streaming eyes. Thank God the wall bed was still down! She fell on it, shaking.

WHAT was that unbelievable ghastly, impossible thing? It was the size of a man, but thin, skeleton thin, and the color of brackish water. It had two legs, two arms, like a man . . . but ending with those huge, birdlike claws. Heaven alone knew what its face was like. She had let go before it was that far clear of the chute.

She thought of the story in the paper. So that was what the bartender saw! He wasn't drunk at all, and what happened when he told the police? They laughed at him. They'd laugh at me, too, she thought. The proof is gone,

burned up in the incinerator. Why did this happen to me? Dead cats on the fire escape, dead monsters in the incinerator chute . . . it's this terrible neighborhood!

She tried to think coherently. Maybe the cat had something to do with it. The bartender said the thing ate a mouse—maybe it had tried to eat the cat, too. A monster like that might eat anything. Her stomach started churning again at the thought.

But what was it doing in the incinerator chute? Someone in the building must have put it there, thinking it would slide all the way down and be burned up. Who? One of *them*, probably. But there couldn't be any more green monsters around. They can't live in an apartment house, walk the streets like anyone else, not even in this neighborhood.

She remembered something else in the bartender's story. He said it looked perfectly normal at first. That meant they could look like humans if they wanted to. Hypnotism? Then any man could be . . .

Suddenly another thought struck her. Supposing they find out I saw—what will they do to me?

She jumped up from the bed, white with fear, her faintness forgotten in the urge to escape. She snatched her bag from the dresser, threw on her brown coat.

At the door, she hesitated, afraid to venture into the hall, yet afraid to stay inside. Finally, she eased open the door, peered out into the corridor. It was deserted. She ran to the elevator, punched the bell, heard the car begin its creaky, protesting ascent.

The elevator door had an automatic spring closing. The first time she tried it, her hands shook and the door sprang closed before she got in. She tried it again. This time she managed to hold it open long enough to get inside. She pushed the button, felt the elevator shake and grind and move slowly down.

Out into the lobby.

Out into the street.

THE FOG was completely gone now. The sun shone on the still-damp street. There were very few people around—The Tenderloin sleeps late. She went into the restaurant next door, sat down at the white-tiled counter. She was the only customer. A sleepy-eyed waitress, her black hair untidily caught into a net, waited, pad in hand.

"Just coffee," Ellen mumbled.

She drank it black and it scalded her throat going down. The waitress put a nickel in the juke box and then Bing Crosby was singing "Easter Parade." Everything was so normal. Listening to

Bing Crosby, how could you believe in things like green monsters? In this sane, prosaic atmosphere, Ellen thought, I must be batty.

She said to herself, "I'm Ellen Tighe, bookkeeper, and I just saw the body of a green man with claws on his feet . . ." No, that didn't help a bit. Put it this way: "I'm Ellen Tighe and I'm 27 years old and I'm not married. Let's face it, any psychiatrist will tell you that's enough cause for neurosis. So I'm having delusions."

It made more sense that way. I read that story in the paper, Ellen thought, and it must have registered way down in my subconscious. That had to be it. Any other way, it was too horrible, too impossible to be borne.

I'll go back to the apartment and call Dr. Clive, thought Ellen. She had the feeling, no doubt held over from the days of measles and mumps, that a doctor could cure anything, even green monsters on the brain.

She drank the last of the coffee and fished in her coin purse for change. Picking up the check, she walked over to the cash register at the end of the counter, facing the street. The untidy waitress came from the back of the restaurant to take the money.

Ellen looked out at the street through the glass front. The man

from 410 was standing out there, smoking a cigarette, watching her. When their eyes met, he abruptly threw away the cigarette and started walking toward the apartment house. Again she felt that faint dread she had experienced in the hall earlier.

The waitress picked up her quarter, gave her back a nickel and a dime. Ellen put the change into her purse, got out her key chain and held it in her hand while she walked quickly next door. 410 was just ahead of her in the lobby; he held the front door open for her.

She kept her head down, not looking at his face, and they walked, Indian file, across the lobby to the elevator. He opened the elevator doors, too, and she stepped in ahead of him.

WHEN the doors clanged shut, she had a feeling of panic. Alone with him . . . cut off from help. He didn't pretend not to know her floor, but silently pressed the proper button. While the car moved slowly upward, her heart was beating wildly.

I'm not convinced, she thought, I'm not convinced. I saw it so plainly . . . I felt it, cold in my hands.

The elevator stopped. The man held the door open and for a moment she thought he was going to say something. His free

hand made a swift, involuntary movement as though he were going to catch her arm. She shrank away, but he stepped back and let her through.

Ellen almost ran down the hall. Behind her, she heard his footsteps going in the opposite direction toward his apartment. She was panting when she reached her door. She fumbled for the right key—front door, office—and then she froze. There was a scratching sound in the apartment.

She put her ear close to the door, listened. There was a rasping noise, like somebody dragging a rake . . . or like claws, great heavy claws, moving over the hardwood floors!

Ellen backed away from the door. It was true, then. She retreated, inch by inch, silently. Get away, leave before it catches you! She turned, ready to make a dash for the elevator . . . and faced the man from 410.

Down at the end of the hall, in front of his apartment, he was watching her. The way he lingered outside the restaurant, the way he looked at her. One of *them* . . . maybe underneath that homely, ordinary face, his skin was green and clammy. Maybe there were long, sharp claws on his feet.

She was breathing unevenly

now. Trapped! The thing in the apartment, the man in the hall. Her eyes darted to the elevator, then back, down the hall, past the door marked 404 . . . the door marked 404! She covered the few yards in a mad dash, flung herself at the door, pounding wildly.

"Please, please!" she sobbed. "Mrs. Moffatt, open, please!"

The door opened at once. Mrs. Moffatt's round, wrinkled face beamed at her.

"Come in, my dear, come in."

She almost fell over the landing. The door closed behind her.

She stumbled to the davenport, sank down, gasping. Two cats rubbed against her legs, purring. Two cats?

She heard herself say stupidly, "Mrs. Moffatt, where's the other cat?" and wondered why she said it.

Then she understood.

The old lady's face quivered, altered, melted into something . . . something green.

OUTSIDE in the hall, the man from 410 slowly returned to his apartment. Pushing open the door, he thought, I'll never get the nerve to ask her out.

Well, probably wasn't a chance, anyhow. What would a girl like her have to do with a lousy cop like me?

—ELISABETH R. LEWIS



RING AROUND THE

By **CLIFFORD D. SIMAK**

Conclusion of 3-Part Serial

Vickers was safe on the other world, but he had to return for Ann—or she'd be slain by those who tried to fight evolution!

SYNOPSIS

WORLD industry is fighting for its life against a group of mutants who are attempting to destroy the world's economic system as the first step in building a new and better world.

The world, in this year of 1977, is in a mess. The cold war still

goes on. The people of the world have lived so long under tension that tension has become the normal way of life.

An indication of this tension is the rapid spread of the Pretensionist clubs, whose members seek security by pretending that they

Illustrated by **DON SIBLEY**

SUN



are living in the past.

The mutants' attack on world industry has taken the form of placing on the market everlasting cars, razor blades, cigarette lighters and light bulbs, thus destroying one industry after another.

Jay Vickers, a writer, is introduced to George Crawford by his agent, Ann Carter. Crawford is head of a coalition of industrial interests which have organized to fight the mutant menace. Crawford wants Vickers to write a book exposing the mutant plot and Vickers refuses.

Vickers and Ann are in love, but Vickers does not realize it. He is obsessed with the memory of a walk with his lost love, Kathleen Preston, 20 years ago, in what seemed to be an enchanted valley.

An old eccentric neighbor, Horton Flanders, hints that there is a new factor in the world which is keeping the world from war and that this same factor, in the last 80 years, has nudged the human race into a technological gallop.

When Flanders disappears, the village suspects Vickers of having done away with him. Eb, the garageman, warns Vickers that a lynch mob is forming and loans him a new *Forever* car, one of the mutant products, to use to make a getaway.

Fleeing, Vickers returns to the country where he had spent his childhood and fallen in love with Kathleen Preston. There, in the now abandoned house where he had lived as a boy, he finds a top, a lost childhood toy. He remembers a fact which until then he had utterly forgotten — as a boy of eight, he had used the top to go into what had seemed to be fairyland.

He is contacted by Crawford, who says that Vickers and Ann Carter are latent mutants. He tells Vickers that the normal humans have a secret weapon they will not hesitate to use against the mutants, pleads with Vickers to aid him in enabling the two groups to reach an understanding short of war.

With Crawford gone, Vickers tries to phone Ann in New York, intending to warn her to get out of Crawford's reach, but her telephone does not answer. Vickers starts back to New York, but when he stops at a town, his car is wrecked by a mob. Escaping, Vickers finds a newspaper, which reveals that mutant shops are being wrecked, mutants are being hunted down.

Vickers risks his life to go back to his wrecked car and retrieve the top he has found. Spotted, he eludes his pursuers and takes temporary refuge in the back room of a hardware store.

In a frantic bid to escape, he uses the top which once before had taken him into "fairyland," although he knows that it could not have been fairyland, but another world co-existing with our own.

The top carries him back to a wilderness, with no sign of Man anywhere. Fearing that he is trapped in a primitive, empty world, he sets out for the region where his and Kathleen's homes were located in the normal world, feeling that, if anywhere, he will find humans there.

After days of travel on foot through the wilderness, he stumbles on what apparently is a factory operated entirely by robots and is convinced that mutants are operating it to manufacture their everlasting products.

He finds the home of Kathleen Preston duplicated in the co-existent world, but Kathleen is not there. Led into a waiting room by a robot, he overhears a conversation and learns that he is not a human being, but an android, a human manufactured by the mutants, and so is Ann Carter. One of the voice he recognizes as that of Horton Flanders.

Enraged and chagrined, Vickers leaves the house and wanders into the woods. There he meets a man by the name of Asa Andrews, a colonist who has been brought to this place, which he

calls Earth No. 2. The mutants, Andrews explains, are bringing the economically and socially oppressed members of the human race there to give them a new start in life. There are an infinite number of co-existing earths traveling in a ring around the Sun, so that with the way between the earths now opened by the mutants, there is no end to living space and opportunity for the human race.

Vickers tries to figure out the setup. The mutants apparently are using Earth No. 2 as an operating base. Because their numbers are small, they employ robots and androids to carry on their campaign against humanity. He is surprised by the many things which he actually seems to know, almost as if he had a previous memory of the situation.

He goes back to the Preston house and there demands an explanation of Flanders. The mind and personality of the actual Vickers, Flanders explains, have been transferred to the android Vickers, so that, when his mind is returned to the original Jay Vickers, he will be able to transmit to his children, through the inherent memory factor, all the advantages of full-blown mutation.

Flanders says one of the factors of mutancy which Vickers carries is a hunch ability, badly

needed to win the fight for a mutant world. The hunch ability, Flanders explains, is the development of a hidden human trait which does away with the necessity of slow, tortuous human reasoning.

He tells Vickers that his job is to stop Crawford, that he is the only man who can do it. Vickers is reluctant to fall in with the mutant campaign. Flanders dangles a reward in front of Vickers: When Crawford and his gang have been stopped, Vickers and Kathleen will be returned to the age of 18. It will be as if all the other years had never been. They will be 18 and in love and they may even hope for immortality, since the mutants are close to the secret of eternal life.

With Flanders gone, Vickers asks a robot, Hezekiah, to bring him the record of his and Kathleen's families. He finds that his mother and father have been placed in suspended animation to await the day when the mutants have established a new human society and immortality is available. Vickers, who had been on the verge of walking out on Flanders and the mutants, now realizes that he has no choice but to work for the mutants, thus to keep the faith that his parents held in the mutant cause.

Hezekiah says, however, that there is no record of any Preston

family. Vickers wonders if Kathleen may be no more than an emotional trap introduced into his android brain to keep him tied to the cause of mutation.

"Hezekiah," he asks, "who is Horton Flanders?"

"Horton Flanders," says the robot, "is an android, just the same as you."

XXXVII

SO Vickers was supposed to stop Crawford. But first he had to figure out the angles.

There was the might of industry, not one industry alone, but the might of all the industry in the entire world. There was the fact that Crawford and industry had declared open war upon the mutants. And there was the matter of the secret weapon.

"Desperation and a secret weapon," Crawford had said, sitting in the hotel room. "But the secret weapon," he had added, "isn't good enough."

First of all, Vickers had to know what the secret weapon was. Until he knew that, there would be no point in making any plans.

He lay in bed and stared at the ceiling and sorted out the facts and had a look at them. Then he juggled them a bit, balancing the strength of normal human against the strength of

mutant. There were many places where they canceled one another and there were other instances where they did not.

He got exactly nowhere.

"And of course I won't," he said. "This is the old awkward normal human way of doing. This is reasoning."

Hunch was the thing.

And how to do the hunching?

He swept the factors from his mind and lay upon the bed, staring at the darkness where the ceiling was, and did not try to think.

He could feel the factors bumping in his brain, bouncing together, then fleeing from each other, but he ignored and shunned them.

An idea came: War.

He thought about it and it grew and gripped him.

War, but a different kind of war than the world had ever known. What was that phrase from the old history of the beginning of World War II? A phony war. And yet not a phony war.

It was a disturbing thing to think about something you couldn't place—to have a hunch—that was it, a hunch gnawing at you and not knowing what it was.

He tried to think about it and it retreated from him and he stopped thinking.

Another idea came: Poverty.

And poverty was somehow tied up with war and he sensed the two ideas, circling like coyotes around the campfire that was himself, snarling and growling at one another in the darkness beyond the flame of his understanding.

He tried to banish them into the darkness and they would not banish.

AFTER a time, he grew accustomed to them and it seemed that the campfire flickered lower and the coyote-ideas did not run so fast nor snap so viciously.

There was another factor, said his sleepy mind. The mutants were short on manpower. That's why they had the robots and the androids.

There would be ways you could get around a manpower shortage. You could take one life and split it into many lives. You could take one mutant life and you could spread it thin, stretch it out and make it last longer and go further. In the economy of manpower, you could do many things if you just knew how.

The coyotes were circling more slowly now and the fire was growing dimmer and I'll stop you, Crawford, I'll get the answer and I'll stop you cold and I love you, Ann, and—

Then, not knowing he had

slept, he woke and sat upright in the bed.

He knew!

SHIVERING in the chill of summer dawn, he swung his legs from beneath the covers and felt the cold of the floor against his bare soles.

Vickers ran to the door and yanked it open and came out into the landing. The stairway spiraled down into the hall below him.

"Flanders!" he shouted. "Where are you, Flanders?"

Hezekiah appeared from somewhere and began to climb the stairs, calling, "What is the matter, sir? Is there something you want?"

"I want Horton Flanders!"

Another door opened and Flanders stood there, bony ankles showing beneath his pajama bottom, sparse hair standing almost erect.

"What's going on?" he asked, tongue still thick with sleep. "What's all this racket about?"

Vickers strode across the hall and grabbed him by the shoulders and demanded, "How many of us are there, Flanders? How many ways was Jay Vickers' life divided?"

"If you'll stop shaking me—"

"I will when you tell me the truth!"

"Oh, gladly," Flanders said.

"There are three of us—you and I and . . ."

"You?"

"Certainly? Why not?"

"But you're older than I."

"You can do a great deal with synthetic flesh," said Flanders. "You should know that. I don't see why you're surprised."

And he wasn't, Vickers suddenly realized. It was as if he had been aware of it all his life.

"The third one?" he asked. "You said there are three of us."

Flanders shook his head. "I'm afraid I can't tell you that yet."

"Why not?"

"It would — create complications for you. Impair your efficiency and thus your value."

"By knowing who the other third of Jay Vickers is?"

"Decidedly. Not only can I not tell you who it is, but I can't even explain why I can't, because it would give away what I must conceal from you."

A frightful suspicion came into Vickers' mind. He stepped away from Flanders and his back touched the doorway to his own room and he leaned against it, shaking.

"I know," he said. "I know who the other is."

Flanders shrugged. "Perhaps. You won't get confirmation or denial from me."

Vickers turned and faced him. "I have it now, everything you

hoped for. I know the secret weapon and the answer to it. You said I should stop Crawford. I can."

"You're sure of that?"

"Completely sure," said Vickers, "but what the hell's the use?"

He went into his room and shut the door.

XXXVIII

THERE had been a moment when he had seen his course straight and clear before him—the realization that Kathleen Preston might have been no more than a conditioned figment, that for years the implanted memory of the walk in the enchanted valley had blinded him to his love for Ann Carter and the love he now was sure she felt for him, disguised behind their silly bitter quarreling.

Then had come the knowledge that his parents slept away the years in suspended animation, waiting for the coming of that world of peace to which they had given so much—waiting, too, for the immortality which alone could revitalize their aged bodies.

And he had not been able to turn his back upon them.

Perhaps, he told himself, it was just as well, for now there was this other factor—making more than one life out of a single individual.

It was a sensible way to do things, possibly a valid method, for the mutants needed manpower. When you needed manpower, you did the best you could with what you had at hand. You placed in the hands of robots the work that could be left to robots, and you took men and women and out of each of those lives you made several, housing the living fractions in the bodies of your androids.

Ann Carter was not another person, at all, but a part of him. For three androids had been given the spark of life from the person who had been Jay Vickers—he and Horton Flanders and Ann Carter. In time, the three of them would let their life flow back again into the body of the original Jay Vickers. And when that happened, he wondered, which one of them would continue as Jay Vickers? Or would none of them? Would it be a sentence of death for all three of them and a continuation of the consciousness that Jay Vickers himself had known? Or would the three of them be mingled, so that the resurrected Jay Vickers would be a Flanders-Carter-Vickers personality?

HE shook his head. There was no way of knowing.

If it were the three of them, a commingling of the three of them,

God help the original Jay Vickers when he was resurrected.

And the love he bore Ann Carter, the tenderness after the moonlight-and-roses years—what of that love now?

There could be no such love, he knew. You could not love a facet of yourself or let a facet of yourself love you.

Twice he had known love of a woman and twice it had been taken from him and now he was trapped with no other choice but to do the job that had been assigned him.

He had told Crawford that when he knew what was going on, he'd come back and talk to him and between the two of them they'd see if there was a compromise.

But there was no compromise now.

Not if his hunch was right.

And Flanders had said that hunch was a mutant way of reasoning, a more mature, more positive way of arriving at the answer to a problem. A method, Flanders had told him, that did away with the winding path of reason that the human race has used through all its formative years.

For the secret weapon was the old, old weapon of deliberate war, waged with mathematical cynicism and calculated precision.

How many wars, he wondered, could the human race survive? And the answer seemed to be: *Just one more real war.*

The mutants were the survival factor in the race of Man and now there was nothing left to him—neither Kathleen nor Ann, nor even, perhaps, the hope of personal humanity. He must work as best he could to carry forward the lone hope of the human race.

Someone tapped softly and politely at the door.

"Yes," said Vickers. "Come on in."

"Breakfast will be ready, sir," said Hezekiah, "by the time you get dressed."

XXXIX

FLANDERS was waiting for him in the dining room when Vickers came down the stairs.

"The others left," said Flanders. "They had work to do. And you and I have plotting."

Vickers did not answer. He pulled out a chair and sat down across from Flanders. The sunlight from the windows came down across Flanders' shoulders and his head stood out against the window glass in bold relief, with the whiteness of his hair like a fuzzy halo. His clothes still were slightly shabby and his necktie had seen better days, but

he still was neat and his face shone with the scrubbing he had given it.

"I see that Hezekiah found some clothes for you," said Flanders. "I don't know what we'd do without Hezekiah."

"A pack of money, too. It was lying on the dresser with the shirt and tie. I didn't take the time to count it, but there seem to be several thousand dollars."

"Hezekiah thinks of everything."

"But I don't want several thousand dollars."

"Go ahead," said Flanders. "We've got bales of it."

"Bales!"

"Certainly. We keep making it."

"You mean you counterfeit it?"

"Oh, bless me, no," said Flanders, "although it's something we have often thought of. Another string to our bow, you might say."

"You mean flood the normal world with counterfeit money?"

"It wouldn't be counterfeit. We could duplicate the money exactly. Turn loose a hundred billion dollars of new money in the world and there'd be hell to pay."

"I can see the point," said Vickers. "I'm amazed you didn't do it."

Flanders looked sharply at him. "I have a feeling that you disapprove of us."

"In some ways I do."

HENZEKIAH brought in a tray with tall glasses of cold orange juice, plates of scrambled eggs and bacon, buttered toast, a jar of jam and a pot of coffee.

"Have you noticed," asked the robot, "how fine the morning is?"

"I have noticed that," said Vickers.

"The weather here is most unusually fine. Much finer, I am told, than on the earth ahead."

He served the food and left, out through the swinging door into the kitchen, where they could hear him moving about at his morning chores.

"We have been humane," said Flanders, "as humane as possible. But we had a job to do and once in a while someone got his toes stepped on. It may be that we will have to get a little rougher now, because we are being pushed. If Crawford and his gang had just taken it a little easier, it would have worked out all right and we wouldn't have had to hurt them or anyone else. Now it has to amount almost to revolution. Had we been given twenty years more, it would have been evolution. Given time, we would have taken over not only world industry and world finance, but world government as well, only they didn't give us the time. The crisis came too soon."

"What we need now," said Vickers, "is a counter-crisis."

"We set up dummy companies. We should have set up more, but we lacked the manpower. Given, the manpower, we would have gone more extensively into the manufacture of certain basic gadgets. But we needed the little manpower we had at so many other places—at key points or to search for other mutants to enlist into our group."

"There must be many mutants," Vickers said.

"There are a number of them," agreed Flanders, "but a large percentage of them are so entangled in the world and the affairs of the normal world that you can't dislodge them. Take a mutant man married to a normal woman. You simply can't break up a happy marriage. Say some of their children are mutants—what can you do about them? Not a thing. You simply watch and wait. When they grow up and go out on their own, you can approach them, but not until then."

"Take a banker or an industrialist upon whose shoulders rests an economic empire. Tell him he's a mutant and he'll laugh at you. He's made his place in life. He's satisfied. His loyalties are set to the pattern of the life he's made and there's nothing we can offer that will interest him."

"You might try immortality," suggested Vickers.

"We haven't got immortality."

"You should have attacked on the governmental level."

FLANDERS shook his head. "We did a little of it, but not much. With a thousand major posts in governments of the world, we would have won easily and quickly. But we didn't have the thousand mutant diplomats to train. By various methods, we headed off crisis after crisis. The carbohydrates relieved a situation which would have led to war. Helping the West get the hydrogen bomb years ahead of time held off the East just when they were set to strike. But we weren't strong enough and we didn't have the time to carry out any well-defined long-range program, so we had to improvise. We introduced gadgets as the only quick way we knew to weaken the socio-economic system of Earth and, of course, that meant that sooner or later we would force Earth industry to band against us."

"What else would you expect?" asked Vickers. "You interfere..."

"I suppose we do," said Flanders. "The human race is our patient. It has a malignant growth. We are surgeons. It will be painful for the patient and there will be a period of conval-

escence, but at least the patient will live and I have the gravest doubts that the human race could survive another war."

"But the high-handed methods you use!"

"Now wait a moment," Flanders objected. "You think there must be other methods and I will agree, but all of them would be equally objectionable to humanity and the old human methods themselves have been discredited long ago. Men have shouted peace and there has been no peace. You would have us hold conferences? I ask you, my friend, what is the history of the conference?"

"Or maybe we should go before the people, before the heads of government, and say to them we are the new mutations of the race and that our knowledge and our ability are greater than theirs and that they should turn all things over to us so we could bring the world to peace. What would happen then? I can tell you what would happen. They'd hate us and drive us out. So there is no choice for us. We must work underground. We must attack the key points. No other way will work."

"**W**HAT you say," said Vickers, "may be true so far as the people are concerned, but how about the individual? How

about the little fellow who gets socked in the teeth?"

"Asa Andrews was here this morning," Flanders told him. "He said you'd been at his place and had disappeared and he was worried about what might have happened to you. But that is beside the point. What I want to ask you is, would you say that Asa Andrews was a happy man?"

"I've never seen anybody happier."

"And yet," said Flanders, "we interfered with him. We took away his job—the job he needed to feed his family and clothe them and keep a roof above their heads. He searched for jobs and could find none. When he finally came for help, we knew that we were the ones who cost him his job that forced him finally to be evicted, to stand in the street and not know where his family would lay their heads that night. We did all this and yet, in the end, he is a happy man. There are thousands of others throughout this earth who have thus been interfered with and now are happy people. Happy, I must insist, because of our interference."

"You can't claim," Vickers contended, "that there is no price for this happiness. I don't mean the loss of job, the bread of charity—but what comes afterward. You are settling them here on this earth in what you are pleased

to call a pastoral-feudal stage, but the fancy name you call it can't take away the fact that, in being settled here, they have lost many of the advantages of advanced civilization."

"We have taken from them," Flanders said, "little more than the knife with which to cut their own or their neighbor's throat. Whatever else we've taken from them will in time be given back, in full measure and with fantastic interest. For it is our hope, Mr. Vickers, that in time to come they all will be like us, that eventually the entire race may have everything we have."

"We are not freaks, you understand, but human beings, the next step in evolution. We're just a step ahead of all the rest. To survive, Man had to change, had to mutate, had to become something more than what he was. We are only the first forerunners of that mutation of survival. And because we are the first, we must fight a delaying action. We must fight for the time that it will take for the rest of them to catch up with us. In us you see not one little group of privileged persons, but all of humanity."

"Humanity," said Vickers sourly, "seems to be taking a dim view of your delaying fight to save them. Up on that world of ours, they're smashing gadget shops and hunting down the mu-

tants and hanging them from lamp posts."

"That's where you come in," Flanders pointed out.

VICKERS nodded. "You want me to stop Crawford."

"You told me you could."

"I had a hunch."

"Your hunches, my friend, are more likely to be right than the most precise reasoning."

"I will need some help," said Vickers.

"Anything you say."

"I want some of your pioneers—men like Asa Andrews—sent back to do some missionary work."

"But we can't do that," protested Flanders.

"They're in this fight, too," said Vickers. "They can't expect to sit back and not lift a finger."

"Missionary work? You want them to go back to tell about these other worlds?"

"That is exactly what I want."

"But no one would believe them. With the feeling running as it is on Earth, they would be mobbed and lynched."

Vickers shook his head. "There is one group that would believe them—the Pretentionists. Don't you see, the Pretentionists are fleeing from reality. They pretend to go back and live in the London of Pepys' day, and to many other eras of the past, but even there

they find certain restraining influences, certain encroachments upon their own free will and their security. But here there is complete freedom and security. Here they could go back to the simplicity, the uncomplicated living that they are yearning for. No matter how fantastic it might sound, the Pretentionists would embrace it."

"You're certain of this?" asked Flanders.

"Positive," said Vickers.

"But that's not all?"

"There is one thing more," said Vickers. "If there were a sudden demand on the carbohydrates, could you meet it?"

"I think we could. We could reconvert our factories. The gadget business is shot now. To dispense carbohydrates, we'd have to set up a sort of black market system. If we went out in the open, Crawford and his crew would break it up."

"At first, perhaps," agreed Vickers. "But not for very long. Not when tens of thousands of people would be ready to fight him to get their carbohydrates."

"When the carbohydrates are needed," Flanders said, "they'll be there."

"**T**HE Pretentionists will believe," said Vickers. "They are ripe for belief, any kind of fantastic belief. To them it will

be an' imaginative crusade. Against a normal population, we might have no chance, but we have a great segment who have been driven to escape by the sickness of the world. All they need is a spark, a word—some sort of promise that there is a chance of real escape instead of the illusory escape they have been driven to. There will be many who will want to come to this second world. How fast can you bring them through?"

"As fast as they come."

"I can count on that?"

"You can count on that." Flanders lifted his shoulders. "I don't know what you're planning. I hope your hunch is right."

"You said it was," Vickers declared.

"You know what you're going up against? You know what Crawford's planning?"

"I think he's planning war. He said it was a secret weapon. I'm convinced it's war."

"But war . . ."

"Let's look at war," said Vickers, "just a little differently than it ever has been looked at, just a little differently than the historians see it. Let's see it as a business because war, in certain aspects, is just that. When a country goes to war, it means that labor and industry and resources are mobilized and controlled by governments. The businessman

plays as important a part as does the military man. The banker and the industrialist are as much in the saddle as the general.

"Now let's go one step further and imagine a war fought on strictly business lines — for the strictly business purpose of obtaining and retaining control in those very areas we are threatening. War would mean that the system of supply and demand would be suspended and that certain civilian items would cease to be manufactured and that the governments could crack down on anyone who would attempt to sell them . . ."

"Like cars, perhaps," offered Flanders, "and lighters and even razor blades."

"Exactly," Vickers told him. "That way they could gain the time, for they need time as badly as we do. Upon military pretext they'd seize complete control of the world economy."

"What you're saying is that they plan to start war by agreement."

"I'M convinced that's it," said Vickers. "They'd hold it to a minimum. Perhaps one bomb on New York in return for a bomb on Moscow and another on Chicago for one on Leningrad. You get the idea—a restricted war, a gentleman's agreement. Just enough fighting to convince ev-

eryone that it was real.

"But phony as it might be, a lot of people would die and there'd always be the danger that someone would get sore and instead of one bomb on Moscow it might be two, or the other way around, or an admiral might get just a bit too enthusiastic and a bit too accurate."

"It's fantastic," Flanders said.

"You forget that they are desperate men. They are fighting, every one of them, Russian and American, French and Pole and Czech, for the kind of life that Man has built upon the Earth. To them we must appear to be the most vicious enemy mankind's ever faced. They are frightened stiff."

"And you?" asked Flanders.

"I'd go back to old Earth, except that I lost the top. I don't know where I lost it, but . . ."

"You don't need the top. That was just for novices. All you have to do is will yourself into the other world. Once you've done it, it's a cinch."

"If I need to get in touch with you?"

"Eb's your man," said Flanders. "Just get hold of him."

"You'll send Asa and the others back?"

"We will."

Vickers rose and held out his hand.

"But," said Flanders, "you

don't need to leave just yet. Sit down and have another cup of coffee."

Vickers shook his head. "I'm anxious to get going."

"The robots could get you back to New York in no time at all," said Flanders. "You could return to old Earth from there."

Vickers said, "I want time to think. I have to do some planning—hunching, you'd call it."

"Buy a car," advised Flanders. "Hezekiah left you enough cash to get one and have some left over. Eb will have more if you need it. It wouldn't be safe to travel any other way. They'll have traps set out for mutants. They'll be watching all the time."

"I'll be careful," Vickers promised.

• XL

THE room was dusty and festooned with spider webs and its emptiness made it seem much larger than it was. The paper was peeling from the walls and the plaster cracks ran like jagged chains of lightning from the ceiling molding to the baseboard at the floor.

But one could see that at one time the peeling paper had been colorful, with garlands of little flowers and the larger figure of a Dresden shepherdess guarding woolly sheep and, beneath the

film of dust, one knew the woodwork lay with some of the old wax still on it, ready to shine again when rescued from neglect.

Vickers turned slowly in the center of the room and he saw that the doors were where they had been and the windows, too, in that other room where he'd just risen from the chair after eating breakfast. But here the door to the kitchen stood open and the windows were dark with the shutters closed against them.

He took a step or two and he saw that he left footprints in the dust and the footprints started at the center of the room. There were no footprints leading from anywhere to the center of the room. The tracks just started there.

He stood and looked at the room and tried to reconstruct it, not as he had known it less than sixty seconds before, but as he first had seen it twenty years ago.

Or was it fantasy—conditioned fantasy? Had he ever actually stood in this room before? Had there ever been a Kathleen Preston? And if there had been, had Jay Vickers ever loved her or had she ever loved Jay Vickers?

He knew that a Vickers family, a poor farm family, had lived not more than a mile from where he stood. He thought of them—the mother, courageous in her ragged dress and drab sweater; the

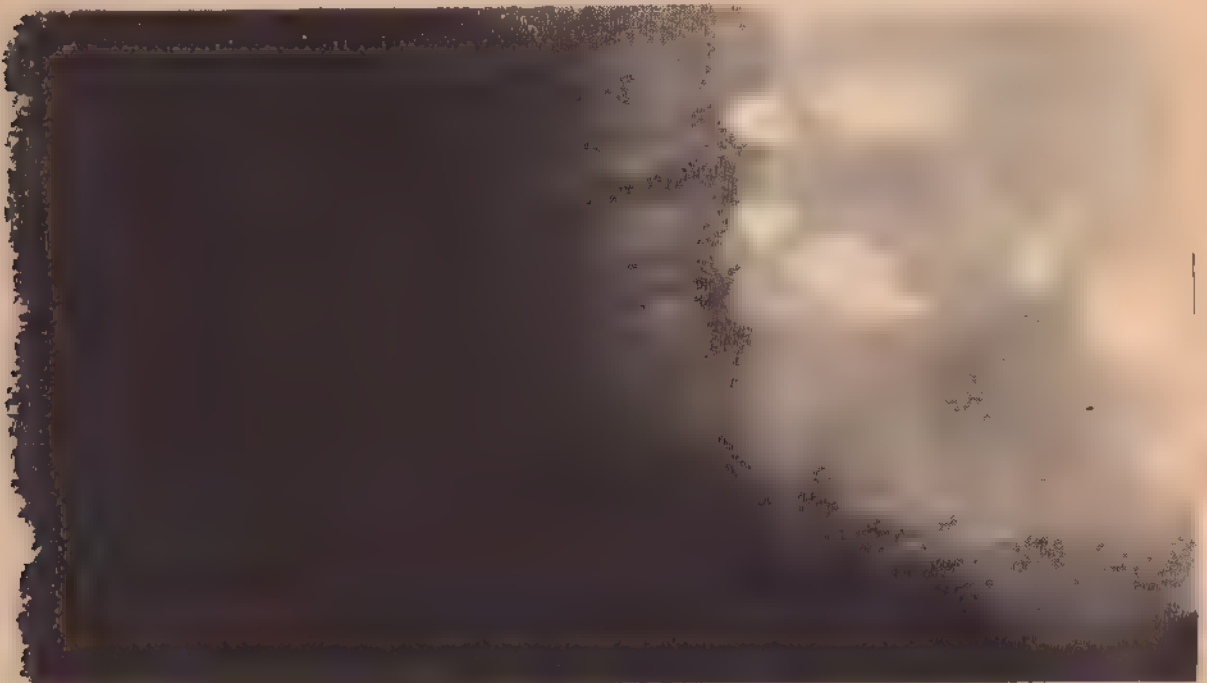
father with the pitiful little shelf of books beside his bed and how he used to sit in faded overalls and too-big shirt, reading the books in the dim yellowness of the kerosene lamp; the son, a helter-skelter sort of kid who had too much imagination and once went to fairyland.

Masquerade, he thought, a bitter masquerade, a listening post set out to spy out the talk of enemies. But it had been their job and they had done it well. They had watched their son grow into a youth and known by the manner of his growing that he was no

throwback, but truly one of them.

And now they waited, those two who had posed as lonely farmer folk for all the anxious years, fitting themselves into an ordinary niche which was never meant for such as they, against the day when they could take their rightful place in the society which they had given up to stand outpost duty for the big brick house standing proudly on its hill.

He could not turn his back on them and now there was no need to turn his back on them, for there was nothing else.





He walked across the dining room and along the hall that led to the closed front door and he left behind him a trail of footprints in the dust.

Outside the door, he knew, was nothing—not Ann, nor Kathleen, nor any place for him—nothing but the cold knife-edge of duty to a life he had not chosen.

XLI

HE had his moments of doubt while he drove across the country, savoring the goodness of the things he saw and heard and smelled—the little villages sleeping in the depth of summer with their bicycles and canted coaster wagons; the friendly bumbling of the great transport trucks on the highways; the way the girl behind the counter smiled at you when you stopped at a roadside eating place.

There was nothing wrong, he told himself, nothing wrong with the little villages or the trucks or the girl who smiled at you when you asked for a cup of coffee. Man's world was pleasant and fruitful, a good place in which to live.

The mutants and their plans seemed like a nightmare snatched from some lurid Sunday supplement and he wondered, as he drove along, why he didn't simply pull off the road and let the

car stay sitting there while he walked off into this good life he saw on every hand. Surely there was some place within it for a man like him; somewhere, here in the flat corn lands where the little villages clung to every crossroad, that a man could find peace and security.

But he saw reluctantly it was not peace and security he sought for himself alone. Just a place to hide from the threat one could sense in the air. In wanting to leave his car beside the road and walk away, he was responding to the same bone-deep fear as the Pretentionists when they escaped emotionally to some other time and place. It was the urge to flee.

The trouble was that even here, in the agricultural heart of the continent, one could feel secure only if one never read a paper or listened to a broadcast and did not talk with people. For the signposts of fear, of the eternal running from the threat of insecurity, could be found on every doorstep and in every home and at every corner.

HE read the papers and the news was bad. He listened to the radio and the commentators were talking about a new and deeper crisis than the world had ever faced. He listened to the people talking in the lobbies of the hotels where he spent the

nights or in the eating places where he stopped along the road. They would talk and shake their heads and one could see that they were worried.

They said: "What I can't understand is how things could change so quick. Here, just a week or two ago, it looked like the East and West would band together against this mutant business. At last they had something they could fight together instead of fighting one another, but now they're back at it again and it is worse than ever."

They said: "If you ask me, it's the Commies that stirred up this mutant business. You mark my word, they're at the bottom of it."

They said: "It just don't seem possible. Here we sit tonight a million miles from war with everything calm and peaceful. And tomorrow . . ."

And tomorrow and tomorrow and tomorrow.

They said: "If it was up to me, I'd get in touch with the mutants. They got stuff up their sleeve that would blow these Commies plumb to hell."

They said: "We never should have demobilized at the end of World War II. We should have hit them then. We could've knocked them off in a month or two."

They said: "The hell of it is

that you never know. No one ever tells you anything and when they do, it's wrong."

They said: "I wouldn't horse around with them a single damn minute. I'd load up some bombs and I'd let them have it."

He listened to them and there was no talk of compromise or understanding. There was no hope in all the talk that war could be averted. "If not this time," they said, "it'll come in five years, or ten, so let's get it over with. You got to hit them first. In a war like this, there ain't any second chance. It's either them or us . . ."

And it was then that he understood that even here, in the heartland of the nation, in the farms and little villages, in the roadside eating places, there was a boiling hate. That was the measure of the culture that had been built upon the Earth—a culture founded on a hatred and a terrible pride and a suspicion of everyone who did not talk the same language or eat the same food or dress the same as everyone else did.

IT was a mechanical culture of clanking machines, a technological world that could provide creature comfort, but not human justice or security. It was a culture that had worked in metals, that had delved into the atom,

that had mastered chemicals and had built a complicated and dangerous gadgetry. It had concentrated upon the technological and had ignored the spiritual so that a man might punch a button and destroy a distant city without knowing, or even caring, about the lives and habits, the thoughts and hopes and beliefs of the people that he killed.

Underneath the sleek technological surface, one could hear the warning rumble of machines. The gears and sprockets, the driving chain, the generator, without the brake of human understanding, were racing on to disaster.

He drove and ate and drove again. He ate and slept and drove. He watched the cornfields and the reddening apples in the orchards and heard the song of mower and smelled the scent of clover and he looked into the sky and felt the terrible fear that hung high there and he knew that Flanders had been right, that, to survive, Man must mutate and that the survival mutation must win before the storm of hate would break.

But it was not only news of approaching war which filled the columns of the daily press and spurred the news commentators into word-frothed quarter hours.

There was still the mutant menace and the continuing ex-

hortations to the people to keep a watch for mutants. There were riots and lynchings and gadget shops burned.

And something else:

A creeping whisper that spread across the land, that was talked over at the drugstore corners and at the dusty crossroads and in the shadowed night spots of the bigger cities—the whisper that there was another world, a brand-new world where one could start his life again, where one would escape from the thousands of years of accumulated mistakes.

The press at first was wary of the rumor, then printed cautious stories with very restrained headlines and the commentators seemed at first to be just as wary, but finally took the plunge. In a day or two, the news of the other world and of the strange, starry-eyed people who had talked to someone else (always someone else) and claimed they had come from there ranked with the news of approaching war and with hatred of the mutants.

You could feel the world on edge, like the sudden, strident ringing of a telephone in the dead of night.

XLII

CLIFFWOOD after dark had the smell and feel of home as Vickers drove along its streets

and felt the lump of loss come into his throat. It had been here that he had thought to settle down and spend his years in writing.

His house was here and the furniture and the manuscript and the crudely carpentered shelf that held his books, but it was his home no longer, and now could never be again. And that wasn't all, he thought. The Earth, the original human earth—the earth with the capital “E”—was his home no more.

He'd go and see Eb first and after he had seen Eb, he'd go to his own house and get the manuscript.

He could give the manuscript to Ann; she would keep it safely for him.

On second thought, he'd have to find some other place, for he didn't want to see Ann—although that was not precisely the truth. He did want to see her, but knew he shouldn't, now that there lay between them the knowledge that he and she were part of a single life.

He pulled the car to a stop in front of Eb's house and sat there for a moment looking at it, wondering at the neatness of the house and yard. Eb lived alone without wife or child, and it was not usual that a man alone would keep a place so tidy.

He'd spend just a minute with

Eb, would tell him what had happened, what was going on, make arrangements to keep in touch with him, and learn from him whatever news might be worth knowing.

He closed the car door and went across the walk, fumbling at the latch of the gate that opened to the yard. Moonlight came down through the trees and splotched the walk with light. He followed it to the porch, and now, for the first time, he noticed that there were no lights burning in the house.

He rapped on the door, knowing from poker sessions and other infrequent visits that Eb had no doorbell.

There was no answer. He waited and finally rapped again and then turned from the door and went down the walk. Maybe Eb was still down at the garage, putting in some overtime on an urgent repair job, or he might be down at the tavern, having a quick one with the boys.

He'd sit out in the car and wait for Eb. It probably wouldn't be safe to go down into the village business section where he'd be recognized.

A voice asked, “You looking for Eb?”

VICKERS spun around toward the voice. It was the next door neighbor, he saw,

standing at the fence.

"Yes," said Vickers. "I was looking for him."

He was trying to remember who lived next to Eb. Someone he knew, someone who might recognize him?

"I'm an old friend of his," Vickers added. "Just passing through. Thought I'd stop and say hello."

The man had stepped through a break in the fence and was coming across the lawn.

"How well did you know Eb?"

"Not too well," said Vickers. "Haven't seen him in ten or fifteen years. We used to be kids together."

"Eb is dead," the neighbor said.

"Dead!"

The neighbor spat. "He was one of those damned mutants."

"No," protested Vickers. "No, he couldn't be!"

"He was. We had another one, but he got away. We always had a suspicion Eb might have tipped him off."

And in the bitterness and hatred of the neighbor's words, Vickers felt the sheer terror of the strange dog cornered by the local pack.

The mob killed Eb and they would kill him if they knew he had returned to town. And in just a little while they'd know, for any minute now the neighbor

would recognize him—now he knew finally who the neighbor was, the beefy individual who worked at the meat counter in the town's one chain store. His name was—It didn't really matter.

"Seems to me," the neighbor said, "I've seen you somewhere."

"You must be mistaken. I've never been East before."

"Your voice . . ."

Vickers struck with all the power he had, starting the first down low and bringing it up in a vicious arc, twisting his body to line it up behind the blow, to put the weight of his body behind it.

He hit the man in the face and the impact of flesh on flesh, of bone on bone, made a whiplike sound and the man went down.

JAY VICKERS did not wait. He went racing for the gate. He almost tore the car door from its hinges getting in. He thumbed the starter savagely and trod down on the gas and the car leaped down the street, spraying the bushes with gravel thrown by its frightened wheels.

His arm was numb from the force of the blow he'd struck. When he held his hand down in front of the lighted dash panel, he saw that his knuckles were lacerated and slowly dripping blood.

He had a few minutes' start, for once the neighbor was on his feet, once he could reach a phone, they'd begin hunting him, screaming through the night on whining tires, with shotgun and rope and rifle.

He had to get away. Now he was on his own. Eb was dead, shot down or strung up or kicked to death, and Eb had been his contact.

Now there was no one but himself and Ann.

And Ann, God willing, didn't even know that she was a mutant.

He struck the main highway and swung down the valley.

There was an old abandoned road some ten miles down the highway, he remembered. A man could duck a car in there and wait until it was safe to double back again, although doubling back probably wouldn't be too safe.

Maybe it would be better to take to the hills and hide out until the hunt blew over.

No, he told himself, there was nothing safe.

And he had no time to waste.

He had to get to Crawford, had to head Crawford off the best way that he could. And he had to do it alone.

THE abandoned road was there, halfway up a long, steep hill. He wheeled the car

into it and bumped along it for a hundred feet or so, then got out and walked back hastily to the road.

Hidden behind a clump of trees, he watched cars go screaming past, but there was no way to know if any of them might be hunting him.

Then a rickety old truck came slowly up the hill, engine howling with the climb.

He watched it, an idea growing in his mind.

When it came abreast, he saw that it was closed in the back with a high end gate.

He went out into the traffic lane and raced after it, caught up with it and leaped. His fingers gripped the top of the end gate and he heaved himself clear of the road, scrambled up and clambered over the boxes stacked inside the truck.

He huddled there, staring out at the road behind him.

A hunted animal, he thought; hunted by men who once had been his friends.

After ten miles or so, someone stopped the truck.

A voice asked: "You see anyone up the road? Walking, maybe?"

"Hell, no," the truck driver said. "I ain't seen a soul."

"We're looking for a mutant. Figure he must have ditched his car."

"I thought we had all of them cleaned out."

"Not all. Maybe he took to the hills. If he did, we've got him—unless he disappears the way they always do when they're warned."

"Your truck'll be stopped again," another voice said. "We phoned ahead both ways. They got road blocks set up."

"I'll keep my eyes peeled," the driver replied.

"You got a gun?"

"No."

"Well, keep watching, anyway."

When the truck rolled on, Vickers saw the two men standing in the road. The moonlight glinted harshly on their rifles.

He set to work cautiously, moving some of the boxes, making himself a hideout.

He needn't have bothered.

The truck was stopped at three other road blocks. At none of them did anyone do more than flash a light inside the truck. They seemed convinced that they wouldn't find a mutant as easily as finding him hidden among crates.

Nor would they, for Vickers would have vanished to Earth No. 2 the instant they closed in. But he was glad he didn't have to.

This was the quickest way to get to Ann Carter.

HE knew what he would find, but he went there just the same, because it was the only place he could think of where he might establish contact. But the huge show window was broken and the miniature house that had stood on display was smashed as utterly as if it had stood in a cyclone's path.

The mob had done its work.

He stood in front of the gaping window and stared at the wreckage of the model house and remembered the day that he and Ann had stopped there on their way to the bus station. The house, he recalled, had had a flying ducks weather vane and a sundial had stood in the yard and there had been a car standing in the driveway, but the car had disappeared completely. Dragged out into the street, probably, and smashed as his own car had been in that little Illinois town.

He turned away from the window and walked slowly down the street. It had been foolish to go to the show room, he told himself, but there had been a slim chance—as he knew all his chances were.

He turned a corner and there, in a dusty square across the street, a good-sized crowd had gathered and was listening to someone who had climbed a park bench and was talking to them.

Idly, Vickers walked across the

street, stopped opposite the crowd.

The man on the park bench had taken off his coat and rolled up his sleeves and loosened his tie. He talked almost conversationally, yet his words carried clear across the park to where Vickers stood.

"When the bombs come," asked the man, "what will happen then? They say don't be afraid. They say stay on your jobs and don't be afraid. But what will they do when the bombs arrive? Will they help you then?"

He paused and the crowd was tense, tense in a terrible silence. You could feel the knotted muscles that clamped the jaws tight shut and the hand that squeezed the heart until the body turned all cold. And you could sense the fear—

"**THEY** will not help," the speaker told them, speaking slowly and deliberately. "They will not help you, for you will be past all help. You will be dead, my friends. Dead by the tens of thousands. Dead and restless atoms. My friends, why don't you heed? The other world awaits. The poor go first. The poor and desperate, the ones for which this world you stand on has no further use. The only way you can go is in utter poverty, by quitting your jobs and

giving away all your possessions.

"In that other world there are no bombs. There is a beginning over, a starting over again. An entire new world, almost exactly like this world, with trees and grass and fertile land and game upon the hills and fish teeming in the rivers. The kind of place you dream of. And there is peace."

There were sirens screaming, getting closer.

Vickers stepped off the sidewalk and dashed across the street.

A squad car roared around a corner, skidding and whipping to get straightened out, its tires screaming on the pavement, its siren a-wail as if in agony.

Almost at the curb, Vickers stumbled and went sprawling. Instinctively, he pulled himself to hands and knees and flicked a sidewise glance to see the squad car bearing down upon him. He knew he could not make it, that before he could get his feet beneath him, the car would crush him.

A hand came down out of nowhere and fastened on his arm and he felt himself catapulting off the street and across the sidewalk.

Another squad car came around the corner, skidding and with flattened tires protesting, almost as if the first had returned to make a second entrance.

The scattered crowd was running in terror.

The hand tugged at his arm and hauled him erect and Vickers saw his benefactor for the first time, a man in a ragged sweater, with an old jagged knife-mark across his cheek.

"Quick," said the man, the knife-mark writhing as he spoke, teeth flashing in the whisker-shadowed face.

He shoved Vickers into a narrow alleyway between two buildings and Vickers sprinted, shoulders hunched, between the walls of brick that rose on either side.

He heard the man panting along behind him.

"To your right," said the man. "A door."

VICKERS grasped the knob and the door swung open into a darkened hall.

The man stepped in beside him and closed the door and they stood together in the darkness, the sound of their gasping beating like an erratic heart in the confining darkness.

"That was close," the man said. "Those cops are getting on the ball. You no more than start a meeting and . . ."

He did not finish the sentence. Instead he reached out and touched Vickers on the arm.

"Follow me," he said. "Be

careful. There are stairs."

Vickers followed, feeling his way down the creaky stairs, with the musty smell of cellar growing stronger with each step.

At the bottom of the stairway, the man pushed aside a hanging blanket and they stepped into a dimly lighted room. There was an old, broken-down piano in one corner and a pile of boxes in another and a table in the center, around which four men and two women sat.

One of the men said, "We heard the sirens."

Scar-face nodded. "Charley was just going good. The crowd was getting ready to start shouting."

"Who's your friend, George?" asked another.

"He was running," said George. "Police car almost got him."

They looked at Vickers with interest.

"What's your name, friend?" asked George.

Vickers told them.

"Is he all right?" asked somebody.

"He was there," said George. "He was running."

"But is it safe . . ."

"He's all right," George insisted, but Vickers noted that he said it too vehemently, too stubbornly, as if he now realized that he might have made a mistake in bringing a total stranger here.

"Have a drink," offered one of the men. He shoved a bottle across the table toward Vickers.

Vickers sat down in a chair and took the bottle.

One of the women, the better-looking of the two, said to him, "My name is Sally."

Vickers said, "I'm glad to know you, Sally."

He looked around the table. None of the rest of them seemed ready to introduce themselves.

He lifted the bottle and drank. It was cheap stuff. He choked a little on it.

SALLY said, "You an activist?"
"I beg your pardon?"

"An activist or purist?"

"He's an activist," said George. "He was right in there with the rest of them."

Vickers could see that George was sweating a little, afraid he had made a mistake.

"He sure as hell doesn't look like one," one of the men stated.

"I'm an activist," said Vickers, because he could see that was what they wanted him to be.

"He's like me," Sally declared. "He's an activist by principle, but a purist by preference. Isn't that right?" she asked Vickers.

"Yes," said Vickers. "Yes, I guess that's it."

He took another drink.

"What's your period?" Sally asked.

"My period?" repeated Vickers blankly. "Oh, yes, my period."

And he remembered the white, intense face of Mrs. Leslie asking him what historic period he thought would be the most exciting.

"Charles the Second," he said.

"You were a little slow on that one," said one of the men suspiciously.

"I fooled around some," Vickers evaded. "Dabbled, you know. Took me quite a while to find the period I liked."

"And then you settled on Charles the Second," Sally said.

"That's right."

"Mine," Sally told him, "is Aztec."

"But Aztec . . ."

"It really isn't fair, is it? There's so little known about the Aztecs. But that way I can make it up as I go along. It's so much more fun that way."

GEORGE said, "It's plain damn foolishness. Maybe it was all right to piddle around with diaries and pretend you were someone else when there was nothing else to do. But now there is something else to do."

"George is right," nodded the other woman.

"You activists are the ones who're wrong," Sally argued. "The basic thing in Pretentionism is the ability to lift yourself

out of your present time and space, to project yourself into another era."

"Now, listen here," said George. "I . . ."

"Oh, I agree that we must work for this other world. It's the kind of opportunity we wanted all along. But that doesn't mean we have to give up . . ."

"Cut it out," said one of the men, the big fellow at the table's end. "This ain't no place for gabbling."

Sally said to Vickers, "We're having a meeting tonight. Would you like to come?"

He hesitated. In the dim light, he could see that all of them were looking at him.

"Sure," he said. "It would be a pleasure."

He reached for the bottle and took another drink, then passed it on to George.

"There won't be anybody stirring for a while," said George. "Not until the cops have a chance to get cooled off a bit."

He took a drink and passed the bottle on.

THE meeting was just getting under way when Sally and Vickers arrived.

"Will George be here?" asked Vickers.

Sally laughed a little. "George here? George is a roughneck. A red-hot. A born organizer. How

he escaped communism is more than I'll ever know."

"And you?"

"We are the propagandists," she said. "We go to meetings. We talk to people. We get them interested. We do the missionary work and get the converts who'll go out and preach. When we get them, we turn them over to people like George."

"I see."

The dowager sitting at the table rapped with the letter opener she was using as a gavel.

"Please," she said. Her voice was aggrieved. "This meeting will come to order."

Vickers held a chair for Sally, then took one for himself. The others in the room were quieting down.

The room, Vickers saw, was really two—the living room and the dining room, with the French doors between them thrown open so that in effect they became one room.

Upper middle class, he thought. Just swank enough not to be vulgar, but failing the grandeur of the really rich. Real paintings on the wall and a Provincial fireplace and furniture that was of some period or other, although he couldn't name it.

He glanced at the faces around him and tried to place them. An executive type over there—a manufacturer's representative, he'd

guess. And that one who needed a haircut might be a painter or a writer, although not a successful one. And the woman with the iron-gray hair and the outdoor tan was more than likely a member of some riding set.

But it did not matter, he knew. Here it was upper middle class in an apartment house with its doorman uniformed, while across the city there would be another meeting in a tenement which had never known a doorman. And in the little villages and the smaller cities they would meet perhaps at the banker's house or at the barber's house. And in each instance someone would rap on the table and say would the meeting come to order, please. At most of the meetings, too, there would be a woman or a man like Sally, waiting to talk to the members, hoping to make converts.

THE dowager was saying, "Miss Stanhope is the first member on our list to read tonight."

Then she sat back, contented, now that she had them finally quieted down and the meeting started.

Miss Stanhope stood up and she was, Vickers saw, the personification of frustrated female flesh and spirit. She was forty, he would guess, and manless, and she would hold down a job that

in another fifteen years would leave her financially independent—and yet she was running from a specter, seeking sanctuary behind the cloak of another personality from the past.

Her voice was clear and strong, but with a tendency to simper, and she read with her chin held high, which made her neck appear more scrawny than it was, in the manner of an elocution student.

"My period, you may remember," she said, "is the American Civil War, with its locale in the South."

She read:

"Oct. 13, 1862—Mrs. Hampton sent her carriage for me today, with old Ned, one of her few remaining servants, driving, since most of the others have run off, leaving her quite destitute of help, a situation in which many of us also find ourselves . . ."

Running away, thought Vickers, running away to the age of crinoline and chivalry, to a war from which time had swept away the blood and agony and made of its pitiful participants, both men and women, figures of pure romantic nostalgia.

She read: ". . . Isabella was there and I was glad to see her. It had been years since we had met, that time back there, in Alabama . . ."

Fleeing, of course. And yet a



fleeing now turned into a ready-made instrument to preach the gospel of that other world, the peaceful second world behind the scarred and tired Earth.

No more than three weeks and they're already organized, Vickers thought, with the Georges to do the shouting and the running and occasionally the dying, and

Sallys to do undercover work.

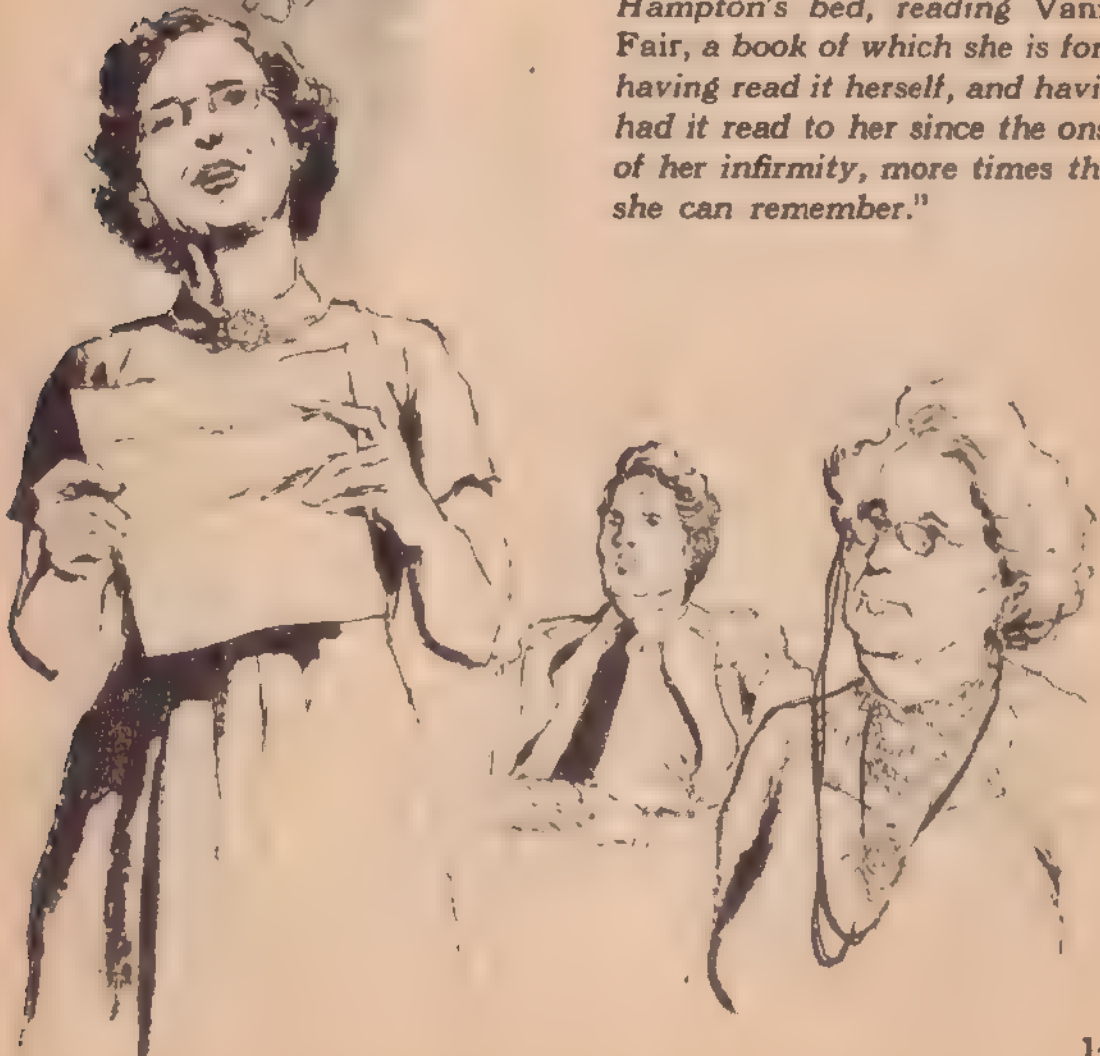
And yet, even with the other world before them, even with the promise of the kind of life they seek, they still cling to the old nostalgic ritual of the magnolia-scented past. It was the mark of suspicion upon them, refusing to give up the dream through fear that the actuality, if they reach-





ed for it, would dissolve beneath their fingertips.

Miss Stanhope read on: "*I sat for an hour beside old Mrs. Hampton's bed, reading Vanity Fair, a book of which she is fond, having read it herself, and having had it read to her since the onset of her infirmity, more times than she can remember.*"



EVEN if some of them still clung to the scented dream, there were others, the Georges among them, who would fight for the promise that they sensed in the second world. They would spread the word and they would flee the police when the sirens sounded and they would hide in the dark cellars and come out again when the police were gone.

The world is safe, thought Vickers. It has been placed in hand that will guard and cherish it, that can do no other than guard and cherish it.

Miss Stanhope read on and the old dowager sat behind the table, nodding her head a little drowsily, but with a firm grip still upon the letter opener, and all the others were listening, some of them politely, but most with consuming interest. When the reading was done, they would ask questions on points of research and pose other matters to be clarified and would make suggestions for the revision of the diary and would compliment Miss Stanhope upon the brilliance of her work. Then someone else would stand up and read about life in some other time and place and once again all of them would sit and listen and repeat the performance.

Vickers felt the futility of it, the dread, dead hopelessness. It was as if the room were filled with

the spice scent of many dusty years.

When Miss Stanhope had finished and the room was stirring with the questions asked and the questions to be asked, he rose quietly from his chair and went out to the street.

The stars were shining.

Tomorrow he would go to see Ann Carter.

And that was wrong, he knew. He shouldn't see her.

XLIV

HE rang the bell and waited. When he heard her footsteps coming across the floor, he knew he should turn from the door and run. He had no right to come here and he knew he shouldn't have. There was no reason why he should see her at all, for the dream of her was dead as the dream of Kathleen.

But he had had to come, literally *had* to. He had paused twice before the door of the apartment building and then had turned around and gone away again. This time he had not turned back, could not, but had gone in and now here he was, before her door, listening to the sound of footsteps coming toward him.

And what, he wondered wildly, would he say to her when the door was opened? What would he do then? Go in as if nothing

at all had happened, as if they each were the same person they had been the last time they had met?

Should he tell her she was a mutant and, more than that, an android, a manufactured woman?

The door came open and she was a woman, as lovely as he remembered her, and she reached out a hand and drew him in and closed the door behind them and stood with her back against it.

"Jay," she said. "Jay Vickers."

He tried to speak, but he couldn't. He only stood there looking at her and thinking: It's a lie. It can't be true.

"What happened, Jay? You said you would call me."

He held out his arms, fighting not to, and she made a quick, almost desperate motion and was in them. He held her close against him and it was if the two of them stood in the final consolation of a misery which each had believed the other did not know.

"I thought at first you were just a little crazy," she told him. "Remembering some of the things you said over the phone from that Wisconsin town, I was almost sure there was something wrong with you—that you'd gone off the beam. Then I got to remembering things, strange little things you had done or said or written and . . ."

"Take it easy, Ann," he said.

"You don't need to tell me."

"Jay, have you ever wondered if you were quite human? If there might not be something in you that wasn't quite the usual pattern—something unhuman."

"Yes," he said. "I've often wondered that."

"I'm sure you aren't. Not quite human, I mean. And that's all right. Because I'm not quite human, either."

FEELING her arms around him, he knew finally that here, clinging to one another, were two wan souls, lost and friendless in a sea of humanity. Neither of them had anyone but the other. Even if there were no love between them, they still must be as one and stand against the world.

The telephone buzzed at them from its place upon the end table and they scarcely heard it.

"I love you, Ann," he said, and a part of his brain that was not a part of him, but a cold, detached observer that stood off to one side, reminded him that he had known he could not love her, that it was impossible and immoral and preposterous to love someone who was closer than a sister, whose life had once been a part of his own and once more would blend with his life into another personality that might be unaware of them.

"I remembered," Ann told him

in a vague and distant voice. "And I haven't got it straight. Maybe you can help me get it straight."

He asked, lips stiff with apprehension, "What did you remember, Ann?"

"A walk I had with someone. I've tried, but I can't recall his name, although I'd know his face, even after all these years. We walked down a valley, from a big brick house that stood on a hill. We walked down the valley and it was springtime because the wild crab apple blossoms were in bloom and there were singing birds and the funny thing about that walk is that I know I never took it, but I remember it. How can you remember something, Jay, when you know it never happened?"

"I don't know," said Vickers. "Imagination, maybe. Something that you read somewhere."

But this was it, he knew. This was the proof of what he had suspected.

There were three of them, Flanders had said, three androids made out of one human life. The three of them had to be himself and Flanders and Ann Carter. Ann remembered the enchanted valley as he remembered it—but because he was a man, he had walked with a girl by the name of Kathleen Preston, and since Ann was a woman, she had walk-

ed with a man whose name she could not recall. And when and if she did recall it, of course it would be wrong. For if he had walked with anyone, it had not been with a girl named Kathleen Preston, but a girl with some other name.

"And that's not all," said Ann. "I know what other people think. I . . ."

"Please, Ann," he said.

"I try not to know what they think, now that I realize that I can do it. I've been doing it, more or less unconsciously, all the time for years. Anticipating what people were about to say. Getting the jump on them. Knowing their objections before they even spoke them. Knowing what would appeal to them. I've been a good businesswoman, Jay, and that may be why I am. I can get into other people's minds. I did only the other day. When I first suspected that I could do it, I tried deliberately, just to see if I could or was imagining it. And I could. Jay, I could!"

HE held her close and thought: Ann's one of the telepaths, one of those who can go out to the stars.

"What are we, Jay?" she asked. "Tell me what we are."

The telephone shrieked at them.

"Later," he said. "It's not so

terribly frightening. In some ways it's wonderful. I came back because I loved you, Ann. I tried to stay away, but I couldn't. Because it isn't right . . ."

"It's right," she almost sang. "Oh, Jay, it's the rightest thing there ever was. I prayed that you would come back to me again. When I knew there was something wrong, I was afraid you wouldn't—that you might not be able to, that something awful might have happened to you. I prayed and the prayer was wrong because prayer was strange to me and I felt hypocritical and awful . . ."

THE ringing was a persistent snarl.

"The phone," she said.

He let her go and she walked to the davenport and sat down and took the receiver out of its cradle, while he stood and looked at the room and tried to bring it and Ann into focus with his memory.

"It's for you," she said.

"For me?"

"Yes. Did anyone know you were coming here?"

He shook his head, but took the receiver and stood with it in his hand, trying to guess who might be calling him and why. Wondering, he knew that he was scared, felt the sweat break out beneath his armpits and trickle

down his ribs, because it could only be one person on the phone.

A voice said: "This is the Neanderthaler, Vickers."

"Club and all?" asked Vickers.

"Break out your spear," said Crawford. "We have a bone to chew."

"At your office?"

"There's a cab outside. It is waiting for you."

"How long have you been tracking me?"

Crawford chuckled. "Ever since Chicago. We have the country plastered with our analyzers."

"Picking up much stuff?"

"A few strays here and there."

"Still confident about that secret weapon?"

"Sure, I'm confident, but . . ."

"Go ahead. You're talking to a friend."

"I have to hand it to you, Vickers. Get over here fast."

He hung up. Vickers took the receiver down from his ear and stared at it a moment, then placed it in the cradle.

"That was Crawford," he said to Ann. "He wants to talk to me."

"Is everything all right, Jay?"

"Fine."

"You'll come back?"

"Well, of course."

"You know what you are doing?"

"Oh, yes," said Vickers. "I know what I'm doing now."

CRAWFORD motioned to the chair beside the desk. Vickers saw with a start that it was the same chair he'd sat in when he'd come to the office, only weeks ago, with Ann.

"It's nice seeing you again," said Crawford. "I'm glad we can get together."

"Your plans must be going well," Vickers said. "You are more affable than when I saw you last."

"I'm always affable. Worried and afraid sometimes, but always affable."

"You haven't picked up Ann Carter."

Crawford shook his head. "There's no reason to. Not yet."

"But you're watching her."

"We're watching all of you. The few that are left."

"Any time we want to, we can come unwatched."

"I don't doubt it," Crawford admitted, "but why do you stick around? If I were a mutant, I wouldn't."

"Because we have you licked and you're the one who knows it," said Vickers, wishing he were half as confident as he hoped he sounded.

"We can start a war. All we have to do is lift a finger and the shooting begins."

"You won't start it."

"You played your hand too hard. You're pushing us into war against our will as a last defense."

"You mean the other world idea?"

"Exactly," Crawford said.

He sat and stared at Vickers with the pale blue bullet eyes peering out unemotionally from the rolls of flesh.

"What do you think we'll do?" he asked. "Stand still and let you steamroller us? You tried the gadgets and we stopped them with, I admit, rather violent methods. So you tried an approach, a sort of religion, a piece of park bench fanaticism—tell me, Vickers, what do you call this business?"

"The blunt truth," said Vickers.

"No matter what it is, it's good. Too good. It'll take a war to stop it."

"You'd call it subversive, I suppose."

"It is subversive," Crawford said. "Already, just a few days since it started, it has shown results. People quitting their jobs, walking away from their homes, throwing away their money. Poverty, they said, that was the key to the other world. What kind of gag have you cooked up, Vickers?"

"What happens to these people? The ones who quit their jobs and threw away their money

—have you kept a check on what happens to them?"

CRAWFORD leaned forward in his chair. "That's the thing that scares us. Those people disappeared before we could round them up."

"They went to the other world," said Vickers.

"I don't know where they went, but I know what will happen if we let it continue. Our workers will leave us, a few at first and then more and more . . ."

"If you want to turn on that war, start reaching for the button."

"We won't let you do this to us," Crawford said. "We will stop you somehow. I told you about the analyzers. Well, they're everywhere. In railroad terminals, bus depots, hotel lobbies, eating joints . . ."

"I thought as much. That's how you picked me up."

"I warned you once before. Don't despise us because we're merely human. With an organization of world industry, you can do a lot of things and do them awfully fast."

"You outsmart yourself," said Vickers. "You've found out a lot of things from those analyzers that you didn't want to know."

"Like what?"

"A lot of your industrialists and bankers and the others who

are in your organization are really the mutants you are fighting."

"I said I had to hand it to you. Would you mind telling me how you planted them?"

"We didn't plant them, Crawford."

"You didn't . . ."

"Let's take it from the start," said Vickers. "Let me ask you what a mutant is."

"Why, I suppose he's an ordinary man who has some extra talents, an understanding of certain things that the rest of us can't grasp."

"And suppose a man were a mutant and didn't know he was, but regarded himself as an ordinary man, what then? Where would he wind up? Doctor, lawyer, beggarman, thief? He'd wind up at the top of the heap. He'd be an eminent doctor or a smart attorney or an artist or a highly successful editor or writer. He might also be an industrialist or banker."

The blue bullets of the eyes stared out from Crawford's face.

"You," said Vickers, "have been heading up one of the finest group of mutants in the world today, men we couldn't touch because they were tied too closely to the normal world."

"I know I have."

"And what are you going to do about it, Crawford?"

"Not a single thing. I'm not

going to tell them."

"Then I will."

"No, you won't," said Crawford. "Because you, personally, are washed up. How do you think you've lived this long in spite of all the analyzers we have? I've let you, that's how."

"You claimed you wanted to make a deal."

"Not any more. You were an asset once. You're a danger now."

"You're throwing me to the wolves?"

"That's just what I'm doing. Good day, Mr. Vickers. It was nice knowing you."

Vickers rose from the chair. "I'll see you again."

"That," said Crawford, "is something I doubt."

XLVI

GOING down the lift, Vickers thought furiously.

It would take Crawford a little while to spread the word that he was unprotected, that anyone could pot him like a sitting duck.

If it had only been himself, it would have been an easy matter, but Ann was involved.

Ann, without a doubt, would become fair game, too, for now the chips were down and Crawford wasn't the kind of man who would play according to rules.

Vickers had to reach Ann.

Reach and tell her fast, keep her from asking questions and make her understand.

At the ground floor, he stepped out with the other passengers and as he walked away, he saw the operator leave the elevator open and dash for a phone booth.

Reporting me, he thought. There was an analyzer on the elevator and it made some sort of a signal that would go undetected to anyone but the operator. And there were other analyzers everywhere, Crawford had said, in railroad terminals and bus stations and eating places — anywhere that a man might go.

Once one of the analyzers spotted a mutant, the word would be called in somewhere—to an exterminator squad, perhaps—and they would hunt the mutant down. Maybe they spotted him with portable analyzers, or maybe there were other ways to spot him, and once they spotted him, it would be all over.

All over because the mutant would not know, because he would have no warning of the death that tracked him. Given a moment's notice, a moment to concentrate, he could disappear, as the mutants had disappeared at will when Crawford's men had tried to track them down for interview and parley.

What was it Crawford had said? "You ring the bell and

wait. You sit in a room and wait."

But now the mutants seldom had a chance since they had no warning.

Except that always before, when Jay Vickers had been spotted, he'd been known as one of the few who were not to be molested—he and Ann and maybe one or two others.

But now it would be different. He was only another mutant, a hunted rat, just like all the others.

HE reached the sidewalk outside the building and stood for a moment, looking up and down the street.

A cab, he thought, but there would be an analyzer in it. There would be analyzers everywhere. There must be one at Ann's apartment building. How else could Crawford have known so quickly that he had arrived there?

There was no way he could duck the analyzers, no way to hide or prevent them from knowing where he might be going.

He stepped to the sidewalk's edge and hailed a cruising cab. It drew up and he stepped inside and gave the driver the address.

The man threw a startled backward look at him.

"You won't be in any trouble," said Vickers, "as long as you don't try anything."

"It's all right, chum," the driver nervously told him. "I won't try a thing."

"That's just fine," said Vickers. "Now let's go."

He watched the blocks slide by, keeping an eye on the driver, watching for any motions that might be signals that there was a mutant in the taxi. The man made none and Vickers gradually relaxed.

A thought struck him. What if they had gone immediately to Ann's apartment and had found her there and were waiting for him now?

It was a risk, he decided, that he'd have to take a chance on.

THE cab stopped in front of the building and Vickers leaped out. The driver gunned the car, not waiting for the fare.

Vickers ran toward the door, ignored the elevator, and went pounding up the stairs.

He reached Ann's door and seized the knob and turned it, but the door was locked. He rang the bell and nothing happened. He rang it again and again. Then he backed to the opposite wall and hurled his body forward across the corridor, smashing at the door. He felt it give as the hinges were loosened. He backed up again. The third try and the door ripped away and sent him sprawling.

"Ann!" he shouted, leaping up. There was no answer.

He went running through the rooms and found no one there.

He stood for a moment, sweat breaking out on him.

Ann was gone! There was little time left to them and Ann was gone!

He plunged out the door and went tearing down the stairs.

When he reached the sidewalk, the cars were pulling up, three of them, one behind the other, and there were two more across the street.

Men were piling out of it, men who carried guns.

He tried to swing around to get back into the door again and bumped into someone. It was Ann, arms filled with shopping bags, and from one of the bags, he saw, protruded the leafy top of a bunch of celery.

"Jay," she said, "what's going on? Who are all these men?"

"Quick," he ordered, "get into my mind. The way you did the others. The way you know how people think."

"But . . ."

"Quick!"

He felt her come into his mind, groping for his thoughts, fastening onto them.

Something hit the stone wall of the building just above their heads and went twisting skyward with a shriek of tortured metal.

"Hang on," he said. "We're getting out of here."

He closed his eyes and willed himself to the other earth, with all the urgency and will he could muster. He felt the tremor of Ann's mind and then he slipped and fell. He hit his head on something hard and stars wheeled inside his skull and something tore at his hand and something else fell on top of him.

WHEN the stars cleared away, he heard the sound of wind blowing in the trees and there were no buildings.

He lay flat upon his back, at the foot of a gray granite boulder. A bag of groceries, with the top of a bunch of celery sticking out of it, lay upon his stomach.

He sat up.

"Ann," he called.

"Here I am," she said.

"You all right?"

"Physically, yes, but not mentally. What happened? Where did we go to?"

"We fell off that boulder," Vickers told her.

He stood up and reached down a hand to help her to her feet.

"But the *boulder*, Jay! Where I live?"

"We're in the second world," said Vickers.

They stood together and looked across the land—wild, desolate, wooded, with scattered rocks and

granite ledges sticking from the hill slopes.

"The second world," repeated Ann dazedly. "That crazy stuff that's been in the papers?"

Vickers nodded gravely. "There's nothing crazy about it, Ann. It exists."

"I'll take your word for it." She paused to grow practical. "Well, we brought our dinner with us. Help me pick up these groceries."

Vickers got down on hands and knees to chase down the potatoes that had escaped from the sack. It had split wide open in the tumble from the boulder.

XLVII

IT was Manhattan as it must have appeared before the white man came, finally to build upon it the Man-made half-wonder, half-monstrosity. But now it was a world unspoiled.

"And yet," said Vickers, "there must be something here. The mutants would have to have some sort of supply depot to store the stuff they'd want to funnel to New York."

"And if they haven't?"

He looked at her and grinned wryly. "How are you at travel?"

"All the way to Chicago?"

"Farther than Chicago," he told her. "On foot. Although we might rig up a raft when we hit

a westward-flowing river."

"There'd be other mutant centers."

"I suppose there would be, but we might not be lucky enough to stumble on one of them."

She shook her head at him. "This is all so strange."

"Not strange," he said. "Just sudden. If we'd had the time, I'd have explained—prepared you—but we didn't."

"Jay, they were shooting at us."

Vickers nodded grimly. "They play for keeps."

"But they're human beings, Jay. Just like us."

"Not like us," said Vickers. "Only human. That's the trouble with them. Being human in this day isn't quite enough." He tossed two or three pieces of wood on the campfire.

"Come on, let's go," he said.

"But it's getting dark."

"If there's anything on the island, we'll spot it by the lights. Just up on that hill. If we don't see anything, we'll come back. When morning comes, we can look again."

"Jay," she said, "in lots of ways, it's just like a picnic."

"I'm no good at riddles. Tell me why it's like a picnic."

"Why, the fire and eating in the open and . . ."

"Forget it," Vickers stated. "We're not on any picnic."

HE moved ahead and she followed close behind him, threading their way between the thickets and the boulders. Night hawks skimmed the air above them in graceful, insect-catching swoops. From somewhere far off came the wickering of a coon. A few lightning bugs flashed on and off, dancing in the bushes.

They climbed the hill, not very high, but fairly steep, and when they reached the top they saw the lights, far down toward the island's tip.

"There it is," said Vickers. "I figured they would have to be here."

"It's a long way off. Will we have to walk it?"

"Maybe not."

"But how . . ."

"And you a telepath."

She shook her head. "I don't understand."

"Go on and try," said Vickers. "Just want to talk to someone down there."

And he remembered Flanders, rocking on the porch and saying that distance should be no bar to telepathy, that a mile or a light-year should not make the slightest difference.

"You think I can?"

"I don't know," said Vickers. "You don't want to walk, do you?"

"Not that far."

"Then give it a try."

They stood silently, looking toward the small area of light in the gathering darkness. He tried to pick out the different locations. There was where Rockefeller Center was located back on the old Earth, and up there Central Park and down there, where the East River curved in, the old abandoned United Nations structure. But the areas were covered with grass and trees instead of concrete and asphalt.

"Jay!" Her whisper was tense with excitement.

"Yes, Ann."

"I think I have someone."

"A man or a woman?"

"Good heavens, neither! He says he's a robot! He says he'll send someone—no, not someone—something for us."

"Ann . . ."

"He says for us to wait right here. They'll be right along."

"Ann, ask him if they can make movies."

"Movies?"

"Motion pictures. Have they got cameras and film?"

"But what do you . . ."

"Just go ahead and ask him."

"He says they can."

"That's fine," said Vickers.

"But motion pictures?"

"I have an idea we can lick Crawford yet."

"Oh, no, you aren't going back!"

"You bet I am."

"Jay Vickers, I won't let you!"

"You can't stop me," Vickers said. "Here, let's sit down and wait to be picked up."

THEY sat down, close together.

"I have a story," Vickers said. "It's about a boy. His name was Jay Vickers and he was very young . . ." He stopped abruptly.

"Go on," she said. "I'd like to hear your story."

"Some other time."

"I want to hear it now."

"Not when a moon is coming up," said Vickers. "That's no time for stories."

And he wondered: Can I ever tell her that we are closer than she thinks, that we came from the same life and will go back to the same body and that we cannot love one another?

She leaned against him and put her head against his shoulder and looked up at the sky.

"It's getting clearer," she said, "not so strange now. Queer as it may be, it seems right. This other world and the things we have, those strange abilities and all and the strange remembering."

He put his arm around her and she turned her head and gave him a quick, impulsive kiss.

"We'll be happy," she said. "The two of us in this new world."

And now, he knew, he could never tell her.

XLVIII

A GIRL'S voice answered the telephone and Vickers asked for Crawford.

"Mr. Crawford is in conference," she said. "He cannot be disturbed."

"Tell him this is Vickers."

"Mr. Crawford cannot be . . . Did you say Vickers? Jay Vickers?"

"That's right. I have news for him."

"Just a minute, Mr. Vickers."

He waited, wondering how long he might have, for the analyzer in the phone booth must have sounded the alarm and the exterminator squad must be on the way.

Crawford's voice said, "Hello, Vickers."

"Call off your dogs," said Vickers. "They're wasting your time and theirs."

He heard the rage in Crawford's voice. "I thought I told you—"

"Take it easy. You haven't got a chance of potting me. Your men couldn't do it when they had me cornered. So if you can't kill me, you better dicker with me."

"Dicker?"

"That's what I said."

"Listen, Vickers, I'm not—"

"Of course you will," said Vickers. "That other world business is really rolling now and

you are getting hurt. It's time you talked sense."

"I'm tied up with my directors," Crawford said.

"That's fine. They're the ones I really want to talk to."

"Vickers, no matter what you're planning, you'll never get away with it. You can't leave here alive. I can't save you if you keep up this foolishness."

"I'm not going away."

"I like you, Vickers. I don't know why. I certainly have no reason to . . ."

"I'm coming up."

"All right," said Crawford wearily. "Do what you want. It's your funeral."

Vickers picked up the film case and stepped out of the booth. An elevator car was waiting and he walked swiftly toward it, shoulders hunched a little against the anticipated bullet in the back.

"Third floor," he said.

The elevator operator didn't bat an eye. The analyzer by now must have given its signal, but more than likely the operator had his instructions on third floor passengers.

VICKERS opened the door to North American Research and Crawford was waiting for him in the reception room.

"Come on," said Crawford

He turned and marched ahead and Vickers followed him down

the long hall. He looked at his watch and did fast mental arithmetic. It was going better than he'd hoped. He still had a margin of two or three minutes. It hadn't taken as long to convince Crawford as he had thought it might.

Ann would be calling in ten minutes. What happened in that time would decide success or failure.

Crawford stopped in front of the door at the end of the hall.

"You know what you are doing, Vickers?"

Vickers nodded.

"One slip and . . ." Crawford made a hissing sound between his teeth and sliced a finger across his throat.

"I understand," said Vickers.

"Those men in there are the desperate ones. There still is time to leave. I won't tell them you were here."

"Cut out the stalling, Crawford."

"What have you got there?"

"Some documentary film. It will help explain what I have to say. You've got a projector inside?"

Crawford nodded. "But no operator."

"I'll run the machine myself."

"A deal?"

"A solution," Vickers said.

"All right, then. Come in."

The shades were drawn and the room was twilit and the long

table at which the men sat seemed to be no more than a row of white faces turned toward them.

Vickers followed Crawford across the room, feet sinking into the heavy carpeting. He looked at the men around the table and saw that many of them were public figures.

There, at Crawford's right hand, was a banker, and beyond him a man who had often been called to the White House to be entrusted semi-diplomatic missions. And there were others also that he recognized, although there were many that he didn't, and a few of them wore the strange dress of other lands.

Here was the directorate of North American Research, those men who guided the destiny of the embattled normals against the mutant menace—Crawford's desperate men.

"A strange thing has happened, gentlemen," said Crawford. "A most unusual thing. We have a mutant with us."

IN the silence, the white faces flickered around at Vickers, then turned back again.

"Mr. Vickers," Crawford went on, "is an acquaintance of some standing. You will recall that we have talked of him before. At one time, we hoped he might be able to help us reconcile the dif-

ferences between the two branches of the human race.

"He comes to us of his own accord and has indicated to me that he may have a possible solution. He has not told me what that solution might be. I brought him directly here. It's up to you, of course, whether you want to hear what he has to say."

"Why, certainly," said one of them. "Let the man talk."

And another said, "Most happy to."

The others nodded their agreement.

Crawford said to Vickers, "The floor is yours."

Vickers walked to the table's head and he was thinking: So far, so good. Now if only the rest works out. If I don't make a slip. If I can carry it off. Because it was win or lose; there was no middle ground.

He set the film case on the table and said, "No infernal weapon, gentlemen. It's a film that, with your permission, I'll show you in just a little while."

They simply sat and looked at him and there was nothing that you could read in their faces, but he felt the coldness of their hatred.

"You're about to start a war," he said. "You're meeting here to decide if you should reach out and turn on the tap . . ."

The white faces seemed to be

leaning forward, all of them straining toward him.

One of them said: "You're either a brave man, Vickers, or an absolute idiot."

"I've come here," said Vickers, "to end the war before it starts."

REACHING into his pocket, Vickers' hand came out in a flicking motion and tossed the thing it held onto the table.

"That's a top," he said. "A thing that kids play with—or used to play, at any rate. I want to talk to you for a minute about a top."

"A top?" raged someone. "Is he trying to make fools of us?"

But the banker across the table said reminiscently, "I had a top like that when I was a boy. They don't make them any more. I haven't seen one of them in years."

He reached out a hand and picked up the top and spun it on the table. The others craned their necks to look at it.

Vickers glanced at his watch. Still on schedule. Now if nothing spoiled it!

"You remember the top, Crawford?" asked Vickers. "The one that was in my hotel room that night you unexpectedly dropped in on me?"

"I remember it," said Crawford.

"You spun it and it vanished."

"And it came back again."

"Crawford, why did you spin that top?"

Crawford licked his lips in embarrassment. "Why, I don't know. It might have been an attempt to rescue a lost memory, an urge to be a boy again."

"You asked me what the top was for."

"You told me it was for going into fairyland and I told you that a week before I would have said that we were crazy — you for saying a thing like that and I for listening to you."

"But before I came in, you spun the top. Tell me, Crawford, why did you do it?"

"Go ahead," the banker urged. "Tell him."

"I did," said Crawford. "I just told you the reason."

Behind Vickers, a door opened. He turned his head and saw a secretary beckoning to Crawford.

ON time, Vickers thought. Working like a charm. Ann was on the phone and Crawford was being called from the room to talk to her. And that was the way he'd planned it, for with Crawford in the room, the plan would be hopeless.

"Mr. Vickers," the banker said, "I'm curious about this business of the top. What connection is there between a top and the prob-

lem that we face?"

"A sort of analogy," replied Vickers. "There are certain basic differences between the normals and the mutants and I can explain them best by the use of a top. But before I do, I'd like you to see my film. After that I can go ahead and tell you and you will understand me. If you gentlemen will excuse me?"

He lifted the film case from the table.

"Why, certainly," the banker said. "Go right ahead."

Vickers went back to the stairs which led to the projection booth, opened the door and went inside.

He'd have to work fast and surely, for Ann could not hold Crawford on the phone very long and she had to keep Crawford out of the room for at least five minutes.

He slid the film into the folder and threaded it through the lenses with shaking fingers and clipped it on the lower spool and then swiftly checked what he had done.

Everything seemed all right.

He found the switches and turned them on and the cone of light sprang out to spear above the conference table. On the screen before the table was a brilliantly colored top, spinning, with the stripes moving up and disappearing, moving up and disappearing—

The film track said: "*Here you see a top, a simple toy, but it presents one of the most baffling illusions . . .*"

The words were right, Vickers knew. Robotic experts had spent days picking out the right words, weaving them together, with just the right relationship, just the right inflection, to give them maximum semantic value. The words would hold the audience, fix their interest on the top, and keep it there after the first few seconds.

He came silently down the stairs and moved over to the door. If Crawford should come back, he could hold him off until the job was done.

THE film track said: "*Now if you will watch closely, you will see that the lines of color seem to move up the body of the top and disappear. A child, watching the lines of color, might wonder where they went, and so might anyone . . .*"

He tried to count the seconds off and the seconds dragged.

The film track said: "*Watch closely now—watch closely. They come up and disappear, they come up and disappear—*"

There were not nearly so many men at the table, only two or three now, and they were watching so closely that they had not even noticed the others disap-

pear. Maybe those two or three would stay. Of them all, these few might be the only ones who weren't unsuspecting mutants.

Vickers opened the door softly and slid out and closed it behind him.

The door shut out the soft persuasive voice of the film tract: "*Come up and disappear—watch*

Why did you spin that top?"

Crawford shook his head. "I can't understand it, Vickers. It doesn't make any sense, but I went into fairyland once myself. Just like you, when I was a kid. I remembered it after I talked to you. Maybe because I talked to you. I sat on the floor and watched the top spin and won-



closely—come up and . . ."

Crawford was coming down the hall, lumbering along.

He saw Vickers and stopped.

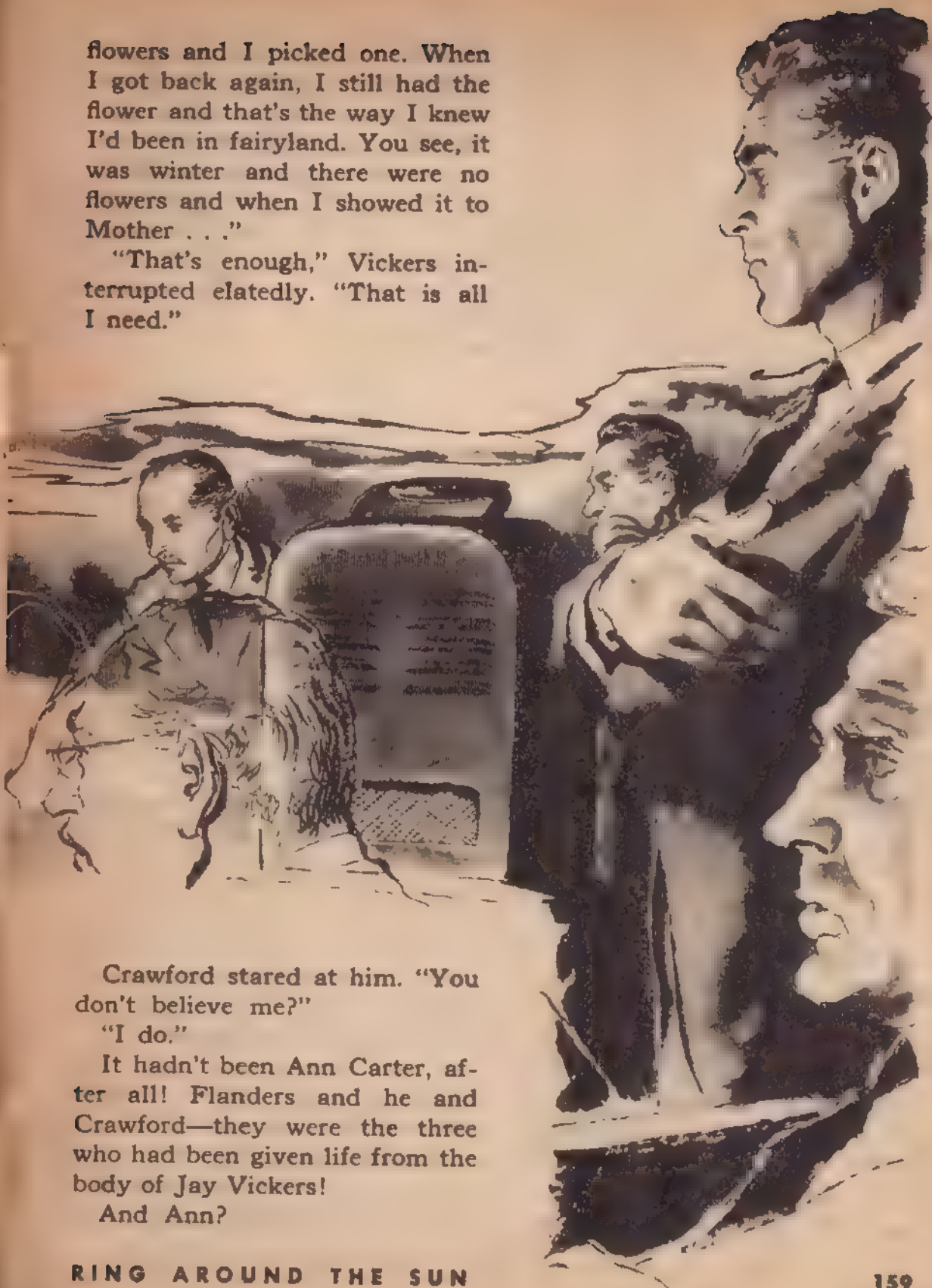
"What do you want?" he asked. "What are you out here for?"

"A question," Vickers said, "one you didn't answer in there.

dered where the stripes were going—you know how they come up and disappear and then another one comes up and disappears. I wondered where they went and I got so interested that I must have followed them, because all at once I was in fairyland and there were a lot of

flowers and I picked one. When I got back again, I still had the flower and that's the way I knew I'd been in fairyland. You see, it was winter and there were no flowers and when I showed it to Mother . . ."

"That's enough," Vickers interrupted elatedly. "That is all I need."



Crawford stared at him. "You don't believe me?"

"I do."

It hadn't been Ann Carter, after all! Flanders and he and Crawford—they were the three who had been given life from the body of Jay Vickers!

And Ann?

Ann had within her the life of that girl who had walked the valley with him—the girl he remembered as Kathleen Preston, but who had some other name. For Ann remembered the valley and that she had walked the valley in the springtime with someone by her side.

There might be more than Ann. There might be three of Ann just as there were three of him, but that didn't matter, either. Maybe Ann's name really was Ann Carter as his really was Jay Vickers. Maybe that meant that, when the lives drained back into the rightful bodies, it would be his consciousness and Ann's that would survive.

And it was all right now to love Ann. She was a separate person and not a part of him.

Ann had come into this world to place a telephone call and to get Crawford from the room, so that he would not recognize the danger of the top spinning on screen, and now she'd gone back to the other world again and the threat was gone.

"Everything's all right," said Vickers. "Everything's just fine."

Soon he'd be going back himself and Ann would be waiting for him. And they'd be happy, the way she had said they'd be, sitting there on a Manhattan hilltop waiting for the robots.

"Well, then," said Crawford, "let's go back in again."

Vickers put out his hand to stop him. "There's no use going in."

"No use?"

"Your directors aren't there," said Vickers. "They're in the second world. The one, you remember, that the Pretentionists preached about in the squares all over town."

CRAWFORD stared at him. "The top!"

"That's right."

"We'll start again," said Crawford. "Another board, another..."

"You haven't got the time. This Earth is done. The people are fleeing from it. Even those who stay won't listen to you, won't fight for you."

"I'll kill you," Crawford said. "I'll kill you, Vickers."

"No, you won't."

They stood face to face silently, tensely.

"No," said Crawford. "No, I guess I won't. I should, but I can't. Why can't I kill you, Vickers?"

Vickers touched the big man's arm.

"Come on, friend," he said softly. "Or should I call you brother?"

—CLIFFORD D. SIMAK

What Strange Powers Did The Ancients Possess?



EVERY important discovery relating to mind power, sound thinking and cause and effect, as applied to self-advancement, was known centuries ago, before the masses could read and write.

Much has been written about the wise men of old. A popular fallacy has it that their secrets of personal power and successful living were lost to the world. Knowledge of nature's laws, accumulated through the ages, is never lost. At times the great truths possessed by the sages were hidden from unscrupulous men in high places, but never destroyed.

Why Were Their Secrets Closely Guarded?

Only recently, as time is measured; not more than twenty generations ago, less than 1/100th of 1% of the earth's people were thought capable of receiving basic knowledge about the laws of life, for it is an elementary truism that knowledge is power and that power cannot be entrusted to the ignorant and the unworthy.

Wisdom is not readily attainable by the general public; nor recognized when right within reach. The average person absorbs a multitude of details about things, but goes through life without ever knowing where and how to acquire mastery of the fundamentals of the inner mind—that mysterious silent something which “whispers” to you from within.

Fundamental Laws of Nature

Your habits, accomplishments and weaknesses are the effects of causes. Your thoughts and actions are governed by fundamental laws. Example: The law

of compensation is as fundamental as the laws of breathing, eating and sleeping. All fixed laws of nature are as fascinating to study as they are vital to understand for success in life.

You can learn to find and follow every basic law of life. You can begin at any time to discover a whole new world of interesting truths. You can start at once to awaken your inner powers of self-understanding and self-advancement. You can learn from one of the world's oldest institutions, first known in America in 1694. Enjoying the high regard of hundreds of leaders, thinkers and teachers, the order is known as the Rosicrucian Brotherhood. Its complete name is the “Ancient and Mystical Order Rosae Crucis,” abbreviated by the initials “AMORC.” The teachings of the Order are not sold, for it is not a commercial organization, nor is it a religious sect. It is a non-profit fraternity, a brotherhood in the true sense.

Not For General Distribution

Sincere men and women, in search of the truth—those who wish to fit in with the ways of the world—are invited to write for complimentary copy of the sealed booklet, “The Mastery of Life.” It tells how to contact the librarian of the archives of AMORC for this rare knowledge. This booklet is not intended for general distribution; nor is it sent without request. It is therefore suggested that you write for your copy to: Scribe O.Y.S.

The ROSICRUCIANS

[AMORC]

San Jose

California



Picture yourself going places

You've done it often. Call it day-dreaming if you like, but you've seen yourself in a bigger job—giving orders and making decisions—driving off in a smart new car—buying your family a fine home.

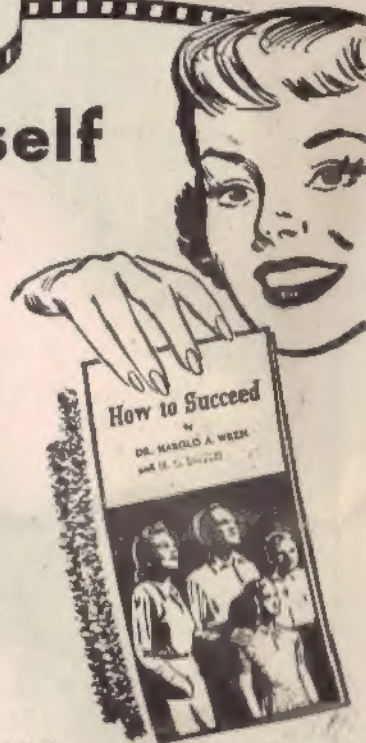
There's nothing wrong with dreams. But how about making them come true? *You can do it, if you're willing to try!*

Look around you. The men who are going places are the *trained* men. They've learned

special skills that bring them better jobs and higher pay. It's the men *without* training whose dreams never come true.

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